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OPTIMA Secretariat
Dpto. Biología Vegetal
E.U.I.T. Agrícola
Universidad Politécnica
E-28040 Madrid, Spain.
Tel.: + 34 91 3365435
Fax: + 34 91 3365656
E-mail: optima@tiscali.es
http:// www. bgbm.fu-berlin.de/OPTIMA/

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NOTICES OF PUBLICATIONS[*]

edited by WERNER GREUTER

General Topics

1. Santiago CASTROVIEJO BOLIBAR – De familias, géneros y especies, la eterna búsqueda de la estabilidad en la clasificación biológica. – Real Academia de Ciencias Exactas, Físicas y Naturales, Madrid, 2004. 79 pages, 1 table, 4 figures; paper.

In his inaugural lecture as a new member of the Madrid Academy, Santiago Castroviejo offers a wide panorama of some critical issues of plant systematics. Starting with such evergreens as the species concept in biology (where he eventually comes down in favour of a morphological definition), he proceeds with outlining some of the real or imaginary problems of today's taxonomy when faced with the implementation of novel phylogenetic paradigms that cause havoc with traditional nomenclature, then concludes with outlining some of the fascinating challenges that our science faces in the computer era, mentioning specifically projects and achievements in the domain of interactive identification, biodiversity informatics, and establishing the Catalogue of Life.

One may object that few if any of these subjects are novel. Yet I feel that it is useful at times to reconsider the bases of one's own science, and profitable to have them expounded in terms that are understandable for the intelligent layman. Foremost in my mind, when reading the concluding message of welcome presented by Enrique SÁNCHEZ-MONGE Y PARELLADA on behalf of the Academy, is the pleasure to see one of us accede to the Olympus of academic distinction that used to be the normal fate of worthy exponents of Taxonomy but is now more often a domain reserved for those who work in more fashionable areas of science. W.G.

Cryptogams

2. Luis Alberto PARRA SÁNCHEZ – Contribution to the knowledge of the genus *Agaricus*. [*Fungi non delineati raro vel haud perspecte et explorate descripti aut definite picti* (ISSN 1128-6008), **24**.] – Candusso, Alassio, 2003. 108 pages, 24 plates of drawings, 24 plates with 48 colour photographs; paper. Price: 13.40 €.

This modest booklet includes the detailed description of 12 rare and ill known *Agaricus* species occurring in but not limited to Spain. The treatment is comprehensive, including full synonymies and detailed macro- and micromorphological descriptions. It is illustrated by analytical drawings (one plate for micro- and one for macroscopic features per species) and excellent colour photographs (1 to 6 per species) showing live fruiting bodies of various ages in varied positions, some in longisection.

This is not compiled information but results from the study of fresh material plus exsiccata kept in private and public herbaria, not only in Spain but also in Portugal, France, the Czech Republic and Hungary. Specimens are enumerated, but beyond the collection localities no information on known distribution is provided, nor is literature cited in which the species is mentioned or perhaps illustrated, beyond what is required for the purpose of synonymy.

The booklet, which is fully bilingual (English and Spanish) is a commendable example, hopefully to be followed by professional and lay mycologists alike, and a worthy member of the appealing new series of *Fungi non delineati*... The single major desideratum for future instalments is an index to scientific names. W.G.

[*] Please send all items for review directly to the editor of this column: Prof. W. Greuter, Botanischer Garten & Botanisches Museum Berlin-Dahlem, Königin-Luise-Str. 6-8, D-14191 Berlin.

3. Pier Luigi NIMIS & Stefano MARTELLOS – A second checklist of the lichens of Italy, with a thesaurus of synonyms. [*Museo Regionale di Scienze Naturali Saint-Pierre Valle d'Aosta, Monografie,* 4; OPTIMA *Commission for Lichens, Publication* No. **5.**] – Museo Regionale di Scienze Naturali Saint-Pierre Valle d'Aosta, Aosta, 2003. 192 pages; hard cover.

To dispel a possible misunderstanding: this is not, as the title might easily suggest, a second edition of NIMIS's monumental catalogue of *The lichens of Italy* (see OPTIMA Newsletter 30: (2)-(3). 1996). For that to appear, we are told, we will have to wait another two or three years. The present work is much more slender, being focused on two precise goals: (a) to provide a list of accepted names for all lichen taxa at the rank of species and below that are known from Italy, and (b) to list the known synonyms (including some misapplications) not only of the Italian but also of a still erratic selection of non-Italian taxa.

Sheer numerical comparisons are dangerous, especially when what is being compared is not exactly defined. We are told that since the Catalogue was published, i.e., within a decade, the number of lichen taxa known for Italy (now 2345 – an easily remembered figure) has increased by 9.3 % or exactly 200 units – but we are not told what a "taxon" is (several subspecies, a small selection of varieties and the odd forma have been included), and even the definition of a "lichen" is rather vague, being a fungal organism, lichenised or not, "traditionally treated by lichenologists". Also, the effective increase must be larger, as there are taxa in the Catalogue that in the Checklist have vanished without leaving a trace (*Polyblastopsis myrticola* being an example). These are caveats, not criticisms, and must not detract from the fact that recent progress of Italian "lichenofloristics" is astounding, particularly at province level, where the taxon number for Umbria has increased tenfold – but incommensurably less than that for Molise which went from nil to 354. Provincial distributions are not, however, within the scope of this book.

The number of entries in the Thesaurus is 12600 – not "infrageneric epithets" as the authors claim, but combinations listed alphabetically by their final epithet (mycologists are accustomed to that curious arrangement; to me, it is still awkward to use). The rate of roughly 5 synonyms per accepted name is rather low, but then the list makes no claim of being complete, and one may easily verify the absence of some basionyms. In its printed form the thesaurus is unwieldy to use, but as the authors rightly explain, when built cleverly into a data accessing and information retrieval system it will be an invaluable tool.

Two lengthy lists are too dry a product for Nimis's taste. As a compensation, he offers us an introductory portion that is well worth reading. His thoughts on the importance of nomenclature and its stability are lightly presented but to the point. Under the Latin subtitle "*nomina si nescis perit et cognitio rerum"*, a classic, he adds a memorable dictum newly coined by him: "The use of Names makes Humans a special case in the Animal Kingdom". Inveterate cladists may object to his use of the term "monophyletic" (would "syncladic" be more appropriate?) when he claims, on Adam and Eve's testimony, to be "monophyletic with Sofia Loren" (no proof in terms of phenetic resemblance is offered), but in his dismissal of phylogenetic principles as the absolute criterion for classification he has many allies. W.G.

4. Per Magnus JØRGENSEN – Conspectus familiae *Pannariaceae* (*Ascomycetes* lichenosae). [*Ilicifolia* (ISSN 0807-2116), **4**.] – Universitetet i Bergen, Botanisk Institutt, 2003 (ISBN 82-7460-014-2). 79 pages; paper.

The medium-sized, cosmopolitan lichen family *Pannariaceae* has been Per Magnus JØRGENSEN's obsession of a lifetime. Its limits are still imperfectly understood, and a world monograph of the family is out of reach. The present synthesis, at least, offers an overall inventory of the taxa, according to the present state of knowledge.

As here defined, the *Pannariaceae* comprise 17 genera (some tentatively included) and well over 250 species. The accepted names and synonyms are listed in alphabetical sequence, with reference to their source of validation and citation of their type (some new lectotypes are designated). Also, some species originally placed in Pannariaceous genera are excluded and referred to their proper place in other families. The lack of reference to synonyms other than the basionym, under the accepted names, makes use of the synopsis less easy than it could have been. W.G.

5. Ruprecht DÜLL, Anna GANEVA, Andrej MARTINČIČ & Zlatko PAVLETIĆ – Contributions to the bryoflora of former Yugoslavia and Bulgaria. Checklists of the Bryophytes of former Yugoslavia and Bulgaria as well as the results of excursions. – IDH-Verlag, Bad Münstereifel, 1999 (ISBN 3-925425-17-9). [3] + 199 pages; paper.

This important contribution to Balkan bryology is basically bipartite, each half in turn consisting of two discrete portions. The first part of the book is concerned with the countries of former Yugoslavia, the second half with Bulgaria. In either case, the treatment starts with an updated checklist of bryophytes for the country or countries concerned, which is followed by a condensed account of the results of the senior author's excursions in the area.

In the checklist treatments, the accepted name is followed by summary statements of the floristic element to which the taxon belongs plus its general distribution; on the next line a synthesis of the distribution within the area is given: by individual countries in the case of former Yugoslavia, by mountain ranges or massifs for Bulgaria. What in most cases is conspicuously (but understandably) lacking are references to the sources of the information. Either checklist includes a number of new country or area records, many of them documented in the appended excursion accounts; of equal importance is the correction of a series of erroneous records that appear in the senior author's earlier publications.

The excursion accounts start with a list of collecting localities followed by an enumeration of the collected species with appended locality numbers. This arrangement permits a very condensed yet informative presentation of the data. Voucher specimens are kept in DÜLL's personal herbarium and in Stuttgart (STU).

The erroneous page numbers given in the table of contents are a minor if slightly vexing flaw in a useful, commendable work. W.G.

Dicotyledons

6. José Antonio LÓPEZ-SÁEZ, Pilar CATALÁN & Llorenç SÁEZ – Plantas parásitas de la Península Ibérica e Islas Baleares. – Mundi-Prensa, Madrid, Barcelona & México, 2002 (ISBN 84-8476-016-2). XXI + 533 pages, 5 tables, 17 text figures (some in colour), 79 maps, 31 plates of drawings, 173 colour photographs; laminated cover. Price: 58 €.

A parasite, it is said, lives comfortably at the cost of others. The cost is real – but how about comfort? If we look at higher plants for an answer, we might be surprised. Becoming a parasite is exceedingly difficult. Only ten times during the whole evolution of flowering plants has the step been successfully made. If evolutionary success is measured in terms of diversity of the parasitic clades, the number decreases to two, or perhaps three: *Santalales, Orobanchaceae* (including the Rhinanthoids), *Cuscuta;* if you take abundance into account, you may add a fourth: *Cassytha* – and that's all! One will look in vain for parasites among the monocots – but one will find them in plenty on the red lists of threatened species.

The peculiar phenomenon of higher plant parasitism is studied in depth in this outstanding book, both in a general way and for the particular case of its role in the Iberian domain. The large systematic core of the work is devoted to the latter aspect and is thereby a regional monograph in its own right, complete with keys, synonymies, descriptions, distribution maps, and as a special boon, generously illustrated in colour. The chapters framing that core are more general in scope. The introductory ones, by two foreign authors, are on parasitic plants worldwide and their phylogeny (Daniel NICKRENT) and on ecophysiological aspects (Thomas KOLB); the concluding chapters are devoted to applied fields: the damage caused to Man by parasitic plants and the means to fight them. The single aspect that one misses, then, is the contrary consideration: how to protect them.

One could say more in pride of this book – but its extensive and utterly readable presentation by Santiago CASTROVIEJO has it all. Additionally, it includes a keen analysis of the present state and prospects of botanical systematics in Spain. W.G.

7. Józef MITKA – The genus *Aconitum* L. *(Ranunculaceae)* in Poland and adjacent countries. A phenetic-geographic study. – Institute of Botany of the Jagiellonian University, Kraków, 2003 (ISBN 83-915161-2-1). 204 pages, 5 tables, 45 figures, 2 colour plates; laminated cover.

The Carpathian mountain chain has the reputation of being the main European centre of diversity of the genus *Aconitum*. Having studied MITKA's revision one is inclined to agree, but also to suspect that taxonomists themselves are not innocent in "inventing" that diversity.

One has to study the work rather carefully to discover the author's way of delimiting his subject. He deals exhaustively with all known *Aconitum* taxa throughout their Carpathian range (including the Czech Republic, Slovakia, the Ukraine, Rumania and Hungary), provided they occur in Poland; those taxa that are absent from Poland he ignores or mentions in passing, omitting them from his index of names. He may feel justified by his method of working, which rests heavily on field studies in addition to specimen analysis, but the approach is hardly satisfactory for a study that rests deliberately on the application of a morpho-geographical concept of taxa.

The work itself is carefully done and well presented, including as it does full keys, descriptions and specimen citations, distribution maps (limited to the Polish territory) and a generous amount of choice illustrations (not to mention an almost full-scale Polish version of 34 pages). Future students of the group will be grateful for this wealth of information and will want to make full use of it – but, when working on a larger geographical scale, will they really concur with MITKA's conclusions? I doubt. I have no qualm with the morpho-geographical concept, nor with the logical claim that in a complex where reticulate evolution prevails a phylogenetic classification makes little sense. But if the number of recognised species (8) equals that of nothospecies, and the same applies for subspecies (5); when judging from the specimens cited a hybrid *(Aconitum ×gayeri)*, in Poland, far outnumbers one of its parents *(A. degenii);* when three subspecies of the same species inhabit by and large the same area, and all three possible hybrid combinations between them are known; then, I feel, something is wrong with the accepted taxonomy.

The nomenclatural treatment, too, suffers from hybrid inflation, even above species level (in fairness, the nothosections and nothoseries are not of MITKA's own invention). Inexplicably, the garden hybrid *Aconitum ×cammarum,* abusively and ineffectively "epitypified" here, is placed in *A.* nothosect. *Acomarum*, of which *A.* sect. *Cammarum* is one of the stated parents ... W.G.

8. Ali Asghar MAASSOUMI – Illustrated guide to the genus *Astragalus* in Iran, vol. 3. [*Research Institute of Forests and Rangelands, Publication* No. **310.**] – Islamic Republic of Iran, Research Institute of Forests and Rangelands, Tehran, 2003 (ISBN 964-473-163-8). [207] pages, 100 plates of drawings; paper. Price: 20,000 Rials (50 €).

The previous volume of this work, published ten years before, was the illustrated counterpart of vol. 2 of the taxonomic revision *The genus* Astragalus *in Iran*, published by the same author in 1989 (see OPTIMA Newslett. 31: (2)-(4). 1997); the present volume, again, complements vol. 3 (1995) of the revision series. The presentation of the *Illustrated guide* has not varied. It consists of 100 full-page drawings of as many different taxa, usually with analytical details, alternating with pages with an extensive English description and a map of the distribution in Iran. Laudably, the specimens from which the drawings were made are cited; not so the botanical artists, who to judge from the signatures on the plates were various. The block of drawings and explanatory texts (to be cited by plate number as there is no pagination) are preceded by a taxonomic synopsis and followed by an alphabetical index of Latin names. There is no preface matter.

Volume 3 of the 1989 revision treated 11 sections of *Astragalus* subg. *Calycophysa*, *i.e.*, the non-spiny perennials with an inflated fruiting calyx. Of these, 8 are represented in the *Illustrated guide, viz., A.* sect. *Alopecuroidei* (6 spp.), sect. *Anthylloidei* (20 spp. + 4 subspp.), sect. *Campylanthus* (8 + 1), sect. *Eremophysa* (6), sect. *Hymenostegis* (28), sect. *Microphysa* (11 + 2), sect. *Poterion* (8 + 3), and sect. *Tricholobus* (2), whereas sect. *Grammocalyx,* sect. *Laxiflori* and sect. *Acidodes* are missing and sect. *Semnanenses* (1), recently described for a misplaced species, is additional. Adding these figures you will find that 90 species and 10 additional subspecies are described and illustrated here, as compared to 140 species plus 15 subspecies in the corresponding revision volume. If one considers the difficulty of obtaining material suitable for illustration, this is a pleasingly high proportion. As far as I can judge, all the illustrations are original and none has been published before, and no less than 9 of the portrayed species have been described quite recently (1998 to 2001). W.G.

9. Jalal EL OUALIDI – Variation et biosystématique du genre *Teucrium* L. *(Labiatae)* en région méditerranéenne. – PhD thesis, Université Hasan II, Faculté des Sciences, Ain Chock-Casablanca, 2001. [13] + 300 pages, 25 tables, 66 figures; paper, plastic front cover sheet.

EL OUALIDI's PhD thesis on Mediterranean *Teucrium* was monitored by the grand old lady in the field, Suzette PUECH of Montpellier, which in itself is a guarantee of high quality. The present work is what is known as a "cumulative" thesis, consisting of a considerable number of loosely associated chapters falling within the same general subject, each corresponding to a separate, previously and independently published paper; the whole being sewed together by a common introductory text, a joint summary and (commendably) an index. In the present case the number of individual papers is no less that 16, grouped under 5 chapters that convey a logical structure to the assemblage: variation at the population level, species level, sectional level and generic level, plus contributions to various aspects of the taxonomy and chorology of the genus. The papers were published under variously combined authorships between 1993 and 2001, one of them even later than the thesis itself (in *Botanical Review* 68: 209-234. 2002).

Most of the papers deal with the W. Mediterranean representatives of *Teucrium* sect. *Polium*, which were often studied at the population level. The methods used include karyology, phytochemistry and DNA sequencing along with classical morphometry. The micromorphology of hairs, and flower diversity as an expression of pollination strategies, were studied on a broader scale, involving all Mediterranean sections of the genus. A synthetic inventory of Mediterranean *Teucrium* taxa, while incomplete and faulty in its details, is a valuable attempt at classifying the known taxonomic diversity by sections and subsections. All in all, EL OUALIDI and his coworkers have contributed many new and interesting aspects to out understanding of their group.

One general criticism I must however raise, that goes far beyond the particular thesis at hand. This does not, as is usual, consist of reprints of published papers stitched or glued together and enriched with new preface matter. The chapters are genuine re-edits of the published versions, differing not only in layout but in many details of wording, even of the title itself. Also, when one looks at these chapters one is misled to believe that they are the work of EL OUALIDI alone, when in fact (as is unobtrusively mentioned in an Annex where the sources are cited) they all have two to four authors. Nowhere did I find a mention that the copyright holders (*i.e.*, the journals concerned) have been asked for let alone granted approval. The unauthorised re-editing of these texts is thus in flagrant conflict with copyright law, and it probably also infringes the co-authors' intellectual property rights. There appears to be something flawed with a university system that tolerates (and perhaps encourages?) unlawful practices in the regulations governing the degrees it awards. Who if not the universities themselves, then, should educate scientists to a scrupulous observance of law and professional ethics? W.G.

Monocotyledones

10. Robert PORTAL & Bernard DUHEM – *Eragrostis* de France et de l'Europe occidentale. French and English keys. – Privately published, Vals près Le Puy, 2002. [1] + 431 pages, 90 maps, 130 plates of drawings, 15 colour plates; laminated cover.

First that splendid book on the fescue grasses (see OPTIMA Newslett. 35: (4)-(5). 2000), and now a new one on the love-grasses: PORTAL decidedly has ideas, energy, and skills. There is much to praise in this profound treatment of a group that, consisting largely of casual aliens in our part of the world, has received far too little attention in the past, if one excepts RYVES's exhaustive treatment for the British Isles.

Compared to the fescue book PORTAL has considerably enlarged his area of coverage. The title has "France and western Europe", but this is an understatement, as the whole of Central Europe as well as the Czech Republic to the east and Italy to the south are covered. The *Flora Europaea* treatment, which excludes casuals and cultivated taxa, keys out 9 species of *Eragrostis* and mentions a tenth, whereas PORTAL provides full accounts, complete with keys, descriptions and illustrations, for no less than 84 species plus a few subspecies and varieties. To be sure, for only 65 species has at least casual occurrence in

the area been reliably recorded; 7 more are cultivated as ornamentals, for 8 the records are dubious or in need of confirmation, 3 were reported based on misidentified material, and one is known from Russia but not farther to the west. It is perhaps surprising to find that full treatment is granted to taxa that must in fact be excluded: this is seldom done, yet the idea has merit as it helps avoiding future errors of the same kind.

As in every book there are some points that might be improved. The key, of which full versions are given in both French and English, commendably starts by distinguishing groups, but uses a fairly confusing and utterly unnecessary informal scaling or ranking for these units (the terms of the hierarchy being group, series, part, subpart, compartment and sub-compartment), when for practical purposes the only meaningful (rankless) groups are those for which subordinate keys are provided. The illustration of the keys by drawings of diagnostic features, again, is exemplary but for the lack of clarity in the cross-referencing between figures and keys. My single real concern, however, is for the lack of data on the specimens figured, of which neither the provenance nor the place of deposit are mentioned.

Love-grass, to my taste, is a much nicer genus than fescue grass. The differences between the taxa may be minute, tricky to see and hard to describe, but the plants have many clear structural features that can be used to tell them apart. Making these differences palpable is the work's outstanding merit. By studying the morphology of the caryopses, tentatively defining 10 informal groups or "morphotypes", PORTAL has opened up a new, most promising domain for love-grass students, which they will be well advised to test on a world scale and use, perhaps suitably refined, for the purpose of formal classification.

Illustration in this work, as in its forerunners, is just great. This applies of course to PORTAL's own drawings, as brilliant as ever before, but also to Bernard DUHEM's astounding colour paintings. DUHEM (rather inappropriately promoted to co-authorship of the book by the way in which the title page is disposed) manages to confer palpable life to tiny and seemingly unattractive objects such as grass caryopses. How he does it is beyond me, but you can really see that some of these caryopses are diaphanous and others opaque! W.G.

11. Niels BÖHLING & Hildemar SCHOLZ – The *Gramineae (Poaceae)* flora of the southern Aegean islands (Greece). Checklist, new records, internal distribution. [*Berichte des Institutes für Landschafts- und Pflanzenökologie der Universität Hohenheim* [ISSN 0947-0778), Beiheft **16**.] – Institut für Landschafts- und Pflanzenökologie, Stuttgart-Hohenheim, 2003. 88 pages, 2 tables, 8 maps and graphs; paper.

This thoroughly innovative publication is based on extensive new South Aegean collections by the two authors and a revision of the rich holdings of the Berlin herbarium from that area. The flora of Crete and the other islands of the South Aegean island arc is considered to be fairly well explored. It is therefore surprising to find so many additions reported here, in particular a > 10 % increase of the Cretan grass inventory.

One should note that a considerable share of the documented increase either concerns recently introduced aliens or is the result of the senior author's narrow species and subspecies concept. Also, as the 9 new names and combinations here validated by him are the nomenclatural fallout of his splitting propensity at the generic level. They concern the newly named *Ochlopoa* (formerly a section of *Poa*), *Anisantha (Bromus), Elytrigia (Elymus)* and *Schedonorus (Festuca).* Remarkable, and not easily justified, is SCHOLZ'S stubborn clinging to long rectified nomenclatural errors ("Monerma" instead of Hainardia; "Ae*gilops caudata"* rather than *Triticum markgrafii).*

Most noticeable among the floristic additions are six species which appear to be first records for Europe. Four are locally occurring weeds of gardens, wastelands and lawns, for which the tendency to spread remains to be demonstrated: the palaeotropical *Dichanthium annulatum* and *Panicum repentellum,* and the N. American *Bouteloua dactyloides* and *Pleuraphis jamesii* (for these, the genera as a whole were previously unrecorded). One *(Rostraria obtusiflora)* has so far been included in *R. cristata* and has probably been reported under that name in previous literature. The last, *Festuca ustulata* known from the mountains of SW Asia and collected by BÖHLING on Mt. Psiloritis, is indeed a remarkable discovery. *Crypsis acuminata,* found by BÖHLING on Rhodes, is apparently new not only for the E. Aegean area but for Greece as a whole. W.G.

12. Walter ROSSI & Anne Eldredge MAURY – Iconografia delle orchidee d'Italia. Iconography of Italian orchids. – Ministero dell' Ambiente e della Tutela del Territorio, Direzione Conservazione Natura & Istituto nazionale per la fauna selvatica "Alessandro Ghigi", [Roma & Bologna], 2002. 242 pages, 6 figures, 82 maps, laminated cover; and [2] text pages + 82 plates of colour paintings on 84 loose sheets; together in cardboard box.

The oversize edition of Anne MAURY's Iconography of Italian orchids, published in 2000 without a text volume, has been extensively reviewed (OPTIMA Newslett. 36: (7)-(8). 2002). It consists of 50 plates sized 70 × 50 cm, sumptuously printed – the Rolls-Royce among recently published orchid works. The announced "somewhat smaller edition" has now arrived and still compares to a top-class Mercedes car. The same marvellous illustrations have been re-disposed on 82 plates of 49 × 34 cm; the outstanding quality of paper and print has been maintained unaltered.

This time, the commentary is present: a quarto volume, printed sepia on cream, with fully bilingual texts and with maps showing the distribution by provinces. The Italian and English versions are placed side by side in two columns (except in the identification keys, which run over the full page width), and for each species they provide full descriptions and many useful details. The errors of fact which I noted last time (wrong name for Ophrys holoserica, wrong identification of Sardinian plants with O. iricolor) have not alas been corrected, the time may have been too short; but there is indeed an index to Latin names of species and subspecies (not varieties) permitting to find the plates (it does not help for the large edition, though, as the numbering has changed). As a curiosity, one may note that the text makes no reference whatever to interspecific hybrids (no blame intended: as many as there are grains of sand in the desert have been described, rightly or wrongly), with the result that the three hybrids that form part of Maury's painting gallery, while maintained on the plates, are orphaned.

Iconography of Italian orchids is one of those achievements on which the funding agents and producers, both the Ministry and the Ghigi Institute, are to be heartily congratulated in the first place. Orchidology owes them, and the artist and text author with them, a real jewel. W.G.

13. Walter ROSSI – Orchidee d'Italia. Disegni di Anne Eldredge MAURY. [*Quaderni di Conservazione della Natura,* **15**.] – Ministero dell'Ambiente e della Tutela del Territorio, Direzione Conservazione della Natura & Istituto Nazionale per la Fauna Selvatica "Alessandro Ghigi", Bologna, 2002 ("ISBN" 1592-2901). 333 pages, 2 pages of text figures, 127 maps, 127 colour plates; 1 paper bound volume, with CD-ROM.

Now here comes the "Volkswagen" version of the foregoing work: a handy volume, practical to use, and yet it has it all. Anne MAURY's paintings and Walter ROSSI's texts are printed on facing pages, much to the user's comfort, and if the print is black on white and the paper less luxurious, both are still of excellent quality. You think you miss the English version? Just look at the CD, it's all there. And whereas the images have been reduced in size and their shades are on the pale side, the CD version has vivid colours and, moreover, permits you to zoom in and see the pictures full size. Resolution, admittedly, is not quite comparable to the Rolls Royce version – but here at least you can be your own driver.

All is there identically, did I say? Well, not quite. Three of the paintings are missing in the "Volkswagen issue": those of the interspecific hybrids, for which there is no text and thus no suitable place. I hope that their loss will not be felt too dramatically. Another loss, more regrettable for practical purposes, is the numbering in the *Orchis* key (which key, same as in the parallel version, also "forgot" one species: *O. anthropophora*). W.G.

14. Paolo GRÜNANGER – Orchidacee d'Italia. [*Quaderni di Botanica Ambientale e Applicata* (ISSN 1121-3572), 11: 3-80.] – Università degli Studi di Palermo, Dipartimento di Scienze Botaniche, Palermo, 2001. 78 pages, numerous figures and maps; paper.

As it happens, two independent treatments of Italian orchids have been published almost simultaneously by two different authors following a very similar style. It is thus tempting to compare them analytically. Both the present work and the one by Walter ROSSI just presented follow the same general pattern: a comprehensive taxonomic treatment, with full keys, descriptions,

indications of ecology and distribution, illustration of each taxon, and exactly the same style of maps showing the Italian distribution by provinces. They have admittedly coordinated their nomenclature (for which ROSSI takes the credit or blame) but not their taxonomy. Even so the differences between them, considering the vast amount of disagreement that prevails in contemporary Mediterranean orchid taxonomy, are relatively minor.

At the generic level there is no divergence at all: both treatments recognise 30 genera with exactly the same circumscription. At the lower levels GRÜNANGER is slightly more on the splitting side, as he recognises 15 species (out of a total of 122) that ROSSI either treats at subspecies level, or only mentions in passing without recognising them, or even completely ignores, as for *Ophrys tardans, O. explanata, O. calliantha and O. panattensis*. These examples show where the main disparities lie: in the genus *Ophrys*, to which 9 of the 15 additional species pertain, the 6 other belonging to *Nigritella* (3), *Dactylorhiza*, *Himantoglossum*, and *Platanthera* (1 each). Moreover, GRÜNANGER liberally uses subspecies rank for *Ophrys* taxa of which the taxonomic status is still in doubt, which is a good thing as it focuses attention on the problem cases without giving them undue sanction.

When valuing GRÜNANGER's contribution one should take into account that he is not a professional plant taxonomist (he works in organic chemistry), and for an amateur in the field his mastery of the subject is indeed quite remarkable. If he is also the author of the drawings illustrating the account (which one must assume, since no statement to the contrary is included), then he is a skilful botanical artist, too. Of course when searching carefully one will find the occasional flaw (such as *Gennaria* being misplaced in the generic key among the genera lacking a flower spur), but in general terms GRÜNANGER's treatment provides an excellent baseline for future orchidological studies, in Italy and elsewhere in the Mediterranean area. W.G.

15. Rosario GALESI & Rosario MASCARA – Guida alle orchidee delle Riserve Naturali Orientate "Bosco di Santo Pietro" e "Sughereta di Niscemi". – Fondo Siciliano per la Natura, Catania, Caltagirone, Comiso & Niscemi, 2003. 80 pages, 42 maps, 2 graphs and numerous photographs all in colour; laminated cover.

Two closely neighbouring nature reserves in the hilly area south of Caltagirone (southern Sicily), mostly covered by evergreen oak woods and corresponding degraded vegetation, house a remarkably rich orchid flora which has been the subject of the present illustrated field guide. the 39 species present, all documented by colour photographs and mapped in a 1 × 1 km grid, correspond to about half of the species known for the whole of Sicily. If (contrary to the booklet) one includes Aceras in Orchis, the total inventory consists of 22 species of *Ophrys*, 7 of *Orchis*, 5 of *Serapias*, and 5 more genera with one species each, corresponding to a total of 39 species. In addition, 37 interspecific hybrids (30 in *Ophrys*, 3 in *Orchis*, 4 in *Serapias*) are mentioned but not treated in any detail.

As is perhaps natural in this kind of study, limited to a very restricted territory, the species concept adopted by the authors is extremely narrow, especially in the spider orchids. If one compares their inventory with the treatments for the whole of Italy just presented, one will find that 8 of the species are not recognised (mostly not even mentioned) in ROSSI's book, 5 of which are not fully accepted, or treated at subspecies rank, by GRÜNANGER. These critical taxa, which are obviously in need of further study and may represent mere variants of scant taxonomic value, are *Ophrys archimedea, calliantha, explanata, flammeola, garganica, obesa, panormitana*, and *sicula*. The same applies, to a barely lesser degree, to several other species of the same genus.

Works such as the present one, with pictures, descriptions, keys and other original data, are a critically important contribution to such a rational evaluation process. W.G.

16. C. A. J. [Karel] KREUTZ – Die Orchideen von Rhodos und Karpathos. Beschreibung, Lebensweise, Verbreitung, Gefährdung, Schutz und Ikonographie. The orchids of Rhodes and Karpathos. Description, pattern of life, distribution, threat, conservation and iconography. – Seckel & Kreutz, Raalte & Landgraaf, 2002 (ISBN 90-805149-2-6). 320 pages, numerous maps and photographs in colour; hard cover with dust jacket.

What a duplicity of events! Just as for Italy (see the two previous items), two quite similar works on the orchids of the SE Aegean Islands have been published independently and by different authors within a very short time span. First came the KRETZSCHMARS and ECCARIUS, with their excellent field guides for Rhodes (2001) and Crete plus the Karpathos group (February 2002) that I have extensively reviewed last time (OPTIMA Newslett. 36: (9)-(10). 2002). Then, only a few months after the latter, I received KREUTZ's voluminous book on the orchids of Rhodes and Karpathos. All these works are splendidly illustrated by colour photographs of the authors, who are all keen experts of their subject, thoroughly familiar not only with the plants in the field but with the ever growing relevant literature as well. One cannot fail to sense a certain competitiveness there, in spite of (or perhaps enhanced by) the fact that, as KREUTZ explicitly acknowledges, he and the other author team did much of their field work jointly and liberally exchanged their data.

There are, of course, differences between these works, differences that are important enough to make it desirable, for any freak of Mediterranean orchids, to possess them all. The geographical coverage is not the same: KREUTZ leaves out not only (as the title tells) the whole of Crete but also Saria and Kasos of the Karpathos group. Then there is size: KREUTZ's book is by no means a field guide but a heavy folio volume, and therefore his photographs (not only the full page but also the half or quarter page ones) are unbeatable in terms of resolution of detail, besides being superbly printed in brilliant colours. KREUTZ's text is bilingual throughout (English and German), which considerably enlarges its potential market. Finally, and most importantly from the point of view of a botanist, there is a clear difference in the taxonomic approach, resulting from distinct and incongruent philosophies in matters of classification.

The splitting tendency that can presently be observed in the work of a number of specialists of Mediterranean orchids – incomprehensibly spearheaded by one who should know better, a professional biologist with a background in pollination biology and population studies – has led to a situation in which species are no longer a meaningful category. This is particularly true in the genus *Ophrys*, and has been rightly stigmatised in recent papers, e.g. by BIEL (in Ber. Arbeitskr. Heimische Orchideen 19: 44-52. 2002). The KRETZSCHMAR team has recognised the danger and adopts a sensible, if still very narrow, concept of species and subspecies, following explicit and basically sound criteria. KREUTZ, however, is in the splitters' camp. In *Ophrys* alone I counted 15 species accepted by him that are either treated as subspecies (3) or not recognised at all (12) by KRETZSCHMAR & al. The latter dozen, in my opinion, are either aberrant individuals that, perhaps due to previous hybridisation, "mimic" other taxa that form true populations elsewhere (among these, I count *O. aesculapii*, *calypsus*, *heterochila*, and *transhyrcana*); or they are variants that occur as scattered individuals of groups of individuals but, genetically, belong in populations of "normal" taxa (as is likely the case of *O. cornutula*, *halia*, *helios*, *gottfriediana*, *eptapigiensis*, *lindia*, *parvula*, and *persephone*). All but one of the latter were described but recently (all in 2001), so they might be given the benefit of doubt, but in my opinion this won't save them in the long run. A pity for the nice names many of them were given!

This criticism may appear harsh. It reflects my undeniable exasperation in view of what I perceive as an unsound recent trend among orchid lovers, and it concerns almost exclusively the spider orchids. In other genera the concepts of KREUTZ almost totally coincide with those of KRETZSCHMAR & al., with two minor exceptions in *Orchis* (the alleged presence of *O. syriaca* and the probably real one of *O. papilionacea* subsp. *schirwanica*, both on Rhodes). The usefulness of the new book as a faithful documentation of the variable appearance of the plants of this group, of their peculiarities, and of the beauty of their flowers, is beyond dispute. W.G.

17. C. A. J. [Karel] KREUTZ – Apochrome *Ophrys*-varianten van Midden-Europa. – Meijs. Limbricht, 1997 (ISBN 90-75946-03-1). [32] pages, 36 photographs (34 in colour); no cover.

Plants with flowers that are "apochromous", *i.e.*, lack pigmentation, are a well known phenomenon in many species. They may occur as single exceptional individuals in normally pigmented plant populations, or as a frequent variant, or may even become the normal case for

whole populations occupying sizeable areas. Such "albino" plants, as they are sometimes called, differ rather strikingly from the normal ones and therefore keep attracting the interest of amateur botanists.

In a genus such as *Ophrys*, where the flowers are spectacular owing their complex shape, structure, and colour patterns, non-pigmented plants are particularly striking; they are also quite rare, which is natural, because the absence of colour will almost certainly preclude any chance of reproductive success. Producing a booklet like the present one must therefore have required extensive searches and, one may infer, a substantial share of good luck.

Apochromous *Ophrys* flowers are never pure white, because only the purple pigments (anthocyanins) are absent. This means that the various shades and tinges of pink, purple and brown have gone (or at least are greatly reduced), whereas the green chlorophyll and yellow carotenoids remain. This fact is reflected in varietal epithets like *ochroleuca* or *flavescens* (never *alba*). In exceptional cases teratological modifications of flower shape may be superposed to apochromy, one such example being here illustrated by a plant, found in Turkey, that has been named *Ophrys apifera* var. *trollii*.

The booklet is a nice illustration of how the central European *Ophrys* species *(O. apifera, araneola, holoserica, insectifera* and *sphegodes)* look when they take to apochromy. W.G.

18. Maia AKHALKATSI, Mariam KIMERIDZE, Siegfried KÜNKELE, Richard LORENZ & Marine MOSULISHVILI – Diversity and conservation of Georgian orchids. – GSNE "Orchis", Tbilisi, 2003. 40 pages, 8 plates with 1 map and 41 photographs in colour; laminated cover. Price: 10 €, postage included.

This new inventory of the orchids of Georgia is the product of a cooperation between a group of that country's naturalists and conservationists, who form the Georgian Society of Nature Explorers "Orchis", and members of the Arbeitskreis Heimische Orchideen Baden-Württemberg who at the same time are among the driving forces behind the OPTIMA Commission for the Mapping of Mediterranean Orchids. British Petroleum, which is building an oil pipeline crossing Georgia, has accepted to sponsor the printing of the booklet.

According to published sources, 47 orchid taxa (46 species, one additional subspecies) had been reported as growing in Georgia. An in-depth study of herbarium material plus extensive field work have substantially modified that list. On the one hand, 5 listed species were found to have been reported in error; on the other hand, 11 additional taxa (10 species, 1 subspecies) were identified on old herbarium material (2), newly discovered in the field (4), or both (5), so that the total now stands at 53 taxa (51 species) belonging to 20 genera. The list is composed quite differently from a typical Mediterranean inventory: *Orchis* (12 species) is largest, followed by *Epipactis* (7 + 1), *Dactylorhiza* (6), *Ophrys* (4 + 1) and *Cephalanthera* (4).

The text is bilingual throughout (English and Georgian). Six of the colour photographs show characteristic orchid habitats, 35 are of plants or flower close-ups pertaining to 19 different species. The documentary value of these images alone makes it worth while to buy this publication, which can be ordered (prepaid) from D. R. Lorenz, Leibnizstr. 1, D-69469 Weinheim. W.G.

19. José Antonio DEL CAÑIZO – Palmeras. 100 géneros. 300 especies. Características, clima, suelo, uso en jardinería, cuidados y curiosidades; ed. 2. – Mundi-Prensa, Madrid, Barcelona & México, 2002 (ISBN 84-7114-989-3). 709 pages, 80 drawings, 650 colour photographs; laminated board. Price: 68 €.

This is the ultimate manual on palms that are cultivated in Spain. One may wonder at first sight: as many as 100 different genera and 300 species? The answer is: indeed so, allowing for several that are not yet grown outside of botanic gardens. In Spain as elsewhere, the fashion of palms has exploded in the last few years. Just look at the figures: in 1991, slightly more than a decade before, readers of the first edition of this book had to be content with one third of the genera now treated, and with 55 rather than 300 species!

While still dealing with only a fraction of the known palms of the world (189 genera and 2200-2300 species), this manual will fully satisfy your curiosity if you accept to forego those species that do not grow outside of the core lands of the

tropics. In its main portion, the book describes and illustrates the complete array of palms that are presently offered for sale by specialised nurseries. It also includes a sizeable and most instructive first, general part in which you will find a wealth of data on the origin, uses, morphology and cultivation of palms, as well as their tribal and subtribal classification. At the end, there are listings of species fulfilling a variety of criteria of aesthetics, hardiness and requirements, and a sizeable bibliography as well.

To me, however, the most noticeable quality of the book is the light-handed, amusing style in which it is written. It is rare to find a manual that one can read almost as if it were a novel. The author has that subtle sense of humour, that slight ironic touch that entertains without offending – as when he asks you, tongue in cheek, whether you happen to ignore the three fundamental laws of living beings that an author and reader must take into account: the laws of generally, of approximately, and of depending on, that govern individual variation; and he then smiles at human kind who, in obstinate blindness and unawares of the Creator's liberality in the matter, accepts the self-inflicted tyranny of the meter, foot and inch.

W.G.

Floras

20. Santiago CASTROVIEJO (gen. ed.), Gonzalo NIETO FELINER, Stephen L. JURY & Alberto HERRERO (vol. ed.) – Flora iberica. Plantas vasculares de la Península Ibérica e Islas Baleares. **Vol. X,** *Araliaceae-Umbelliferae*. – Consejo Superior de Investigaciones Científicas, Real Jardín Botánico, Madrid, 2003 (ISBN 84-00-08150-1, volume; 84-00-06221-3, set). XLV + 498 pages, map, 128 plates of drawings; cloth with dust jacket.

Flora iberica, the unequalled trendsetter among modern national Floras, is nearing halfway completion or, in optimistic terms, the point of no return. Happily, the publication of the present volume coincides with a grant renewal, showing that the funding agency, the Spanish Ministry of Science and Technology through its General Directorate of Research, is satisfied with the work done – as it well may be. Spain can take justified pride in the impressive series that results from the combined efforts of Spain's leading botanical specialists of the young and older generation, working together in harmony.

The Flora is planned in 21 volumes, of which the present one is the 10th. Volumes 1 to 8 and 14 had been published previously (see OPTIMA Newslett. 36: (13)-(14). 2002), Nos. 9, 12, 13 and a few more are announced as imminent. The treatment of *Compositae* (vol. 16, presumably a twin volume, just as vol. 7 covering the legumes) and grasses (vol. 19) will likely be among the last to be published.

Volume 10 is devoted to 2 families of very unequal size, *Araliaceae* and *Umbelliferae*, totalling 84 genera and 220 species. The former is represented by the singe genus *Hedera* (ivy), of which three species occur in Spain and Portugal – they are now arguably the best studied plants of that whole area. The umbel family is divided into innumerable mostly very small genera, none of which is highly critical taxonomically. No less than 45 are represented by a single species, and only three have 10 or more Iberian members of that rank: *Bupleurum* (17, by Susana NEVES), *Eryngium* (16, by Gonzalo NIETO), and *Peucedanum* (10, by Antonio GUILLÉN). Other medium-sized representatives, with 6 to 9 species each, are *Seseli*, *Pimpinella*, *Conopodium*, *Daucus*, *Laserpitium*, *Oenanthe*, *Thapsia*, and *Torilis*. All in all, 30 different authors have contributed to the volume, among which Stephen L. JURY (who wrote up 20 generic treatments and co-ordinated the production of several more) and Luís VILLAR (11 genera) must be mentioned in the first place.

The lay-out and pattern of presentation of the Flora are by now familiar and call for no special comment. The mere fact that they have not varied perceptibly through time is the best possible compliment to those who designed the Flora in the first place and continue to supervise it with relentless rigour. Santiago CASTROVIEJO, the central figure in the team, may be proud of how well those presently in charge are following in his footsteps. It is pleasing to report that the retirement of the first and most prominent illustrator of the Flora, Eugenio SIERRA, has not affected adversely the high standard of the drawings. In the person of J. L. CASTILLÓ, who signed most or all of the 128 plates, a worthy successor has been found.

W.G.

21. Ginés A. LÓPEZ GONZÁLEZ – Guía de los árboles y arbustos de la Península Ibérica y Baleares. (Especies silvestres y las cultivadas más comunes). – Mundi-Prensa, Madrid, Barcelona & México, 2002 (ISBN 84-8476-050-2); id., ed. 2, 2004 (ISBN 84-8476-210-6). 894 pages, 850 drawings, 812 colour photographs; laminated cover. Price: 49 €.

The last issue of this book review column includes the eulogy of the two-volume work, by the same author, *Los árboles y arbustos de la Península Ibérica e Islas Baleares* (see OPTIMA Newslett. 36: (15). 2002). The present book (and its unchanged second "edition" of 2004) is its reduced version, a single volume still too bulky to be considered a pocket book but more amenable to be squeezed into a holiday suitcase. Smaller type and image size compensate the book's reduced dimensions; elimination of 44 % of the photographs, of the bibliography and glossary, and omission of many species that are neither generally cultivated nor genuine shrubs or trees, furthermore resulted in a substantially lower page number (894 instead of 1727). One will look in vain for the full treatments of dwarf shrubs like *Helianthemum* and *Fumana* that were a special if somewhat extravagant treat for the owner of the fuller version, or for many of the climbers. A few families have entirely vanished, such as *Pandanaceae*. However, the usefulness of the work is but marginally impaired by such cuts. The single major new feature that is likely to irritate traditionally minded users is the switch in family sequence, from the Dahlgren system (which for the elderly is itself appallingly modern) to a cladistic arrangement based on DNA sequence data. W.G.

22. Mariano GARCÍA ROLLÁN – Atlas clasificatorio de la flora de España peninsula y balear. Vol. 2, ed. 2. – Ministerio de Agricultura, Pesca y Alimentación (ISBN 84-491-0525-0) & Mundi-Prensa (ISBN 84-8476-034-0), Madrid, 2001. 797 pages, numerous drawings and colour photographs; laminated cover. Price: 46.68 €.

Receipt of the second, corrected (but essentially unaltered) edition of the second half of this flora is a good occasion to briefly introduce the work, not hitherto presented in this column. It is designed to satisfy the needs of amateur botanists, unfamiliar with sophisticated descriptive terminology and lacking optical instruments. To achieve its goal it uses a simple vocabulary (also explained in a glossary) and straightforward keys. The families and genera, traditionally defined, are arranged in alphabetical sequence (which to my mind is far from ideal when one starts from the unknown plant – as the untrained invariably do – rather than from a preconceived name). The species, however, appear in the sequence in which they are keyed out. There are no descriptions beyond those that the key provides, and a bare minimum of information on habit, habitat, occurrence, and synonymy; but most of the species are illustrated, either by colour photographs of quite acceptable quality or by drawings. The latter are less satisfactory, rather crude and in some cases plainly misleading. The author indeed encourages the users to add their own drawings, taking advantage of the generous surplus of blank space that the chosen layout entails.

A book, then, best suited for the artistically gifted? Perhaps so, but probably also a useful tool for others who, without aspiring at perfection, seek a means of quick, at least approximate plant identification. To judge from the rapid need for a second edition, the work is remarkably successful in fulfilling that role. W.G.

23. Oriol de BOLÒS & Josep VIGO – Flora dels Països Catalans. Volum IV (Monocotiledònies). – Barcino, Barcelona, 2001 (ISBN 84-7226-698-2, volume; 84-7226-591-9, set). 750 pages, numerous maps and drawings; hard cover with dust jacket.

No better Flora than a complete one! And if a major such work reaches that stages, after many years of hard work, it is an event to celebrate. The first volume of the Catalan Flora was published in 1984! Mind you, 17 years is not a dreadfully long period of time for such a work, written by a small team of only two.

The whole Flora is very homogeneous in its style and overall policy, which has been described appreciatively in the reviews of the previous volumes (see, e.g., OPTIMA Newslett. 31: (6). 1997, on vol. 3). I will not of course repeat what I then wrote, but rather concentrate on the present volume. It comprises the whole of the monocots, almost exactly 20 % of the total species number – 717 out of 3556, to be exact. A

comparison with the corresponding figures in the one-volume "Flora manual" of 1990, covering the same area and by largely the same authors, is interesting: The larger work comprises 34 species less than the condensed version as a total; but the number of monocot species, on the contrary, has increased by 17.

The four largest families are the grasses (303 species), sedges (113), lilies (in the wide, Englerian sense: 97) and orchids (67). Same as at family level, several genera (e.g. *Elymus,* but not *Triticum*) and many species (e.g. in *Festuca* or *Ophrys*) are more broadly defined than is now fashionable – but fashion varies, and who is to tell right from wrong in what, basically, is a matter of taste? Mainly due to this generous species concept, combined with the recognition of an unusually high number of infraspecific ranks, several new infraspecific combinations have been validated in the book. There is no separate index to nomenclatural novelties, but if my count (based on the general index) is correct there are no less than 76 that are so declared, involving 28 different genera *(Allium, Asparagus, Avenula, Carex, Catapodium, Corynephorus, Dactylis, Deschampsia, Echinochloa, Elymus, Epipactis, Festuca, Gastridium, Gladiolus, Iris, Juncus, Koeleria, Lolium, Micropyrum, Narcissus, Ophrys, Orchis, Rostraria, Scirpus, Setaria, Stipa, Tamus,* and *Trisetum).* They concern the ranks of subspecies (38) variety (28), subvariety (3) and even forma (7), and include two newly described taxa (one subspecies, one variety) and two *nomina nova*. They have all been painstakingly indexed and included in the online IPNI database.

The Flora, naturally, is written in the Catalan language. Don't be deterred, though. It is fairly easy to understand written Catalan if one has some knowledge of French and Spanish, and the polyglot dictionary of Catalan technical terms at the end of each volume, which even has some elements of grammar added, is a supplementary *help. It would of course have been nice to find* an aid to correct pronunciation, too. For that, however, one will have to resort to other sources.

The first volume of the Flora has, most deservedly, been distinguished by the award of an OPTIMA Medal to its authors. This medal is reproduced as frontispiece in the final volume – a welcome testimony of the value that this award has acquired, over the years, in the eyes of the Mediterranean botanical community. W.G.

24. Luis VILLAR, José Antonio SESÉ & José Vicente FERRÁNDEZ – Atlas de la flora del Pirineo Aragonés. II (*Pyrolaceae-Orchidaceae.* Síntesis). – Instituto de Estudio Altoaragoneses & Consejo de Protección de la Naturaleza de Aragón, Huesca, 2001 (ISBN 84-8127-119-5, vol. 2; 84-89862-03-6, set). XXII + 790 pages, 10 tables, 8 figures, numerous maps and drawings, 58 colour photographs on 16 extra plates; hard cover.

One more Flora that has been completed (see OPTIMA Newslett. 33: (2). 1998) – a Flora that had the remarkable peculiarity of dispensing with keys and descriptions altogether. According to its original concept, the drawings provided for each species were to serve as a surrogate for descriptive and diagnostic text – but apparently the users were not fully satisfied. Even though volume one was so well received that it sold out within the year and had to be reprinted, the authors now agreed to modify their policy and add for every species a short paragraph mentioning diagnostic features, especially those that are not apparent on the drawings.

The number of vascular plant species that are fully treated is somewhat higher than the predicted total of 2300. The numbering reaches 2382, a figure that still appears to be very much on the low side, for several combined reasons. One reason is the understandably synthetic approach to apomict groups such as *Taraxacum* and *Hieracium*, where many more "species" are known from Aragón than are here recognised. In *Taraxacum* the Flora has 9 numbered units (only 4 of them with an illustration), but several dozen additional binomials, some of which may never have been validly published, are mentioned. Similarly, the 6 numbered *Pilosella* and 28 *Hieracium* taxa are only the tip of an iceberg of agamospecies with binary names that are merely cited; again, only a fraction of the main species or species groups is represented by drawings. A further increment is due to the discovery in Aragón, subsequent to the publication of volume one, of a substantial number of additional species: they are enumerated (but neither portrayed nor mapped) in an appendix. The authors estimate that, when one also takes the non-naturalised aliens into account, the real number of vascular plant species present in the area comes close to 3100.

The book has concluding chapters summarising information on regionally threatened species and phytogeographically relevant data. Sadly, no index to the colour photographs is present, nor is there a reference to them under the relevant entries in the text. These pictures, an attractive and useful feature of the book, are by consequence rather lost from a practical point of view. W.G.

25. Mauro BIAGIOLI, Giovanni GESTRI, Bruno ACCIAI & Antonino MESSINA – Fiori sulla pietra. Flora vascolare illustrata delle ofioliti e delle altre terre del Monteferrato in Toscana. [*Collana Storia e Identità*, **7**.] – Comune di Montemurlo & Gramma, Perugia, 2002. 310 pages, drawings, maps, numerous colour photographs; hard cover with dust jacket.

Three years earlier, the same team of authors published another, rather similar flower book, *Le verdi perle del Monteferrato*, volume 4 of the same *Collana* (see OPTIMA Newslett. 34: (19)-(20). 1999) – "a jewel", as I then wrote; and here again we are presented with such a jewel. It is devoted to the flora of Monteferrato, a serpentine outcrop forming a series of three hills in an area shared between the municipalities of Prato and Montemurlo. Participants to the 2nd OPTIMA Meeting in Florence in 1977 may remember visiting it on a one-day excursion (see Webbia 34: 29-31. 1979).

Contrary to the earlier book, which focused on aesthetic and floristic highlights and devoted most of its pages to the orchid family, this one is a balanced, complete inventory of the flora. There are some keys occasionally, and short descriptions of every species, usually preceded by a paragraph explaining its name. In a tabular appendix, which simultaneously serves as an index to scientific names, a remarkable feature is hidden: a complete survey of ecological indicator values according to ELLENBERG-LANDOLT's system, by which the preferences of each species with respect to moisture, acidity and nutrient richness of the soil, light, temperature and continentality of the climate are shown in a five-level numerical scale.

When comparing the two books one starts wondering why many species that were described and illustrated in the first are missing in the present one when it claims to be complete. The answer is hidden but lies in a different geographical coverage. The earlier book refers to the whole protected area of Monteferrato, a much larger territory than the serpentine hills of Monteferrato proper to which the present volume confines itself. Here, many of the rarer, not serpentine-tolerant taxa are naturally absent. Still, the vascular flora of this tiny area comprises 850 species!

One unusual trait of the book is its complex numbering system. Each species is designated by a six-digit number, in which the first digit stands for the phylum, the second for the order, the third for the family, the forth and fifth for the genus and the last for the species. These numbers, which would otherwise be dispensable, are used for reference purposes in the index and as captions for the illustrations. It would have been more user-friendly to cite page numbers in the former case and spell out the plant names in the latter. This would also have made proofreading easier, and would perhaps have prevented the mislabelling of the *Dianthus armeria* image as *D. carthusianorum*.

Which brings up the subject of illustration: a glorious aspect of the work, as far as the photographs are concerned (we better forego the few pages of minute, hastily scribbled drawings). Even taking into account that colour photography has progressed amazingly in recent years, one is still in awe when looking at the pictures presented here. Many of them portray humble plants, grasses and the like, but somehow manage to bring forth their intrinsic beauty. Look at *Stellaria neglecta*, to mention but one example: I doubt that another picture of that species has yet been published that can compete with this one aesthetically. The printer, too, has done a splendid job (he may therefore be forgiven for having turned the picture of *Adonis annua* upside down, and shifted that of *Borago officinalis* by 90 degrees). W.G.

26. Dimitrios PHITOS, Arne STRID & Sven SNOGERUP (ed.) – Flora hellenica. Volume two, edited by Arne STRID & Kit TAN. – Gantner, Ruggell, 2003 ['2002'] (ISBN 3-904144-92-8, volume; 3-87429-390-4, set). Pages [I]-XVI, 1-380, [381-482], 483-511, coloured frontispiece, 613 maps, hard cover. Price: 155 €.

The general plan of *Flora hellenica*, the first comprehensive Flora for Greece in its present boundaries, has been presented when volume one was published (see OPTIMA Newslett. 33: (3)-(4). 1998). The general style of presentation has not changed, and *Flora hellenica* keeps its firm place among the carefully edited major, critical Floras of our time.

Volume two completes the treatment of the families covered by the first volume of *Flora europaea*, which means that the project has now been completed for about one fifth. By far the largest among the 17 families included are the *Cruciferae* (66 genera), followed at a distance by the *Ranunculaceae* (19 genera). The most important genera are *Ranunculus* (53 species; by STRID), *Alyssum* (33; by HARTVIG), *Erysimum* (33; by POLATSCHEK & SNOGERUP), *Sedum* (29, by the late Henk 't HART), and *Saxifraga* (25; by ANAGNOSTOPOULOS & STRID). Several other authors have contributed accounts but (characteristically for the authoritarian way in which the project is run) there is no separate list or acknowledgement of contributors in the preface material.

Five new taxa have been named in this volume (3 species, 1 nothospecies, one subspecies), and 10 new combinations (for 4 species and 6 subspecies) validated. The 610 distribution maps, generated directly from the Flora Hellenica Database, are prominent among the valuable features of the book. W.G.

27. Adıl GÜNER, Neriman ÖZHATAY, Tuna EKIM & Kemal Hüsnü Can BAŞER (ed.) – Flora of Turkey and the East Aegean Islands, Volume eleven (Supplement 2). – University Press, Edinburgh, & Tübitak, Ankara, 2000 (ISBN 0-7486-1409-5). XIX + 656 pages; hard cover. Price: 140 £.

In 1991, when I reviewed the first Supplement to Flora of Turkey (in OPTIMA Newslett. 24-29: (28)), I did not hope to see further such supplements in the future. This is one instance in which I am delighted to be proved wrong. What I had then underestimated was the immense educational work done by Peter DAVIS and his friends and colleagues in Edinburgh, who over the years participated in raising new generations of Turkish botanists trained to the spirit and skills of modern taxonomic and floristic work. During the 40 years in which *Flora of Turkey* was produced, about 50 botanists from Turkey had the opportunity to visit the Royal Botanic Garden in Edinburgh, its famous herbarium and library, and familiarise themselves with sound European tradition of botanical taxonomy and flora-writing. That seed has meanwhile matured and multiplied. Among the first major harvests is the present book.

Supplement 2 essentially follows the model of the first supplement, except in two respects. First, the complex tabular appendix (120 pages) of the first supplement was not updated in full, but only with regard to its first, most important and informative table. Second, by squeezing the essence of that bulky chapter into merely 2 pages, room was freed for an additional, surprisingly rich and voluminous section on chemical contents. The results there summarised have been produced in their overwhelming majority by Turkish phytochemists publishing in a variety of local and international journals and books.

The updates to the Flora proper constitute the initial, most voluminous section of the book (324 pages). I found no obvious errors or omissions among these carefully researched data (even though absolute completeness is, of course, impossible to attain). This portion of the Supplement is concerned with newly described taxa and those that were newly reported for the Flora's territory, but not with other distributional, taxonomic and/or nomenclatural data, although in obvious cases new synonymies have been taken into account. The number of additional taxa (567 in total, of which 413, i.e. + 4.8 %, are species) is impressive. 14 taxa (10 species, 3 nothospecies, 1 variety) have been first described and named in the present book.

Other updated chapters relate to bibliography and chromosome counts. Contrary to the main section, the bibliographic update largely neglects the (Greek) East Aegean Islands, the excuse being that the relevant information can be found in STRID's *Flora hellenica bibliography* of 1996. Personally I would have thought it preferable to again include the relevant information here.

None would have been more pleased than Peter DAVIS, could he still witness the good success of his passing the staff to the botanists of Turkey – the country to which he devoted the better half of his lifetime's botanical endeavour. Were he to form a wish, I am certain it would be for continuity: not perhaps for an indefinite multiplication of supplements (they become unwieldy

to use after a while) but rather, why not, for a new, critically revised and updated edition of the whole Flora? W.G.

28. Loutfy BOULOS – Flora of Egypt. Volume three *(Verbenaceae-Compositae).* – Al Hadara, Cairo, 2002 (ISBN 977-5429-25-0). XVI + 373 pages, 77 plates of drawings + 32 plates of colour photographs, map; hard cover with dust jacket. Price: 95 US$.

For his 70th birthday Loutfy BOULOS has made a marvellous birthday present to himself and to us all: the 3rd volume of his *Flora of Egypt*, which concludes the dicot treatment and leaves but the monocots to wait for. An excellent reason to celebrate, for sure; because the work, as I had the opportunity to ascertain, is once again of outstanding quality.

Is it perhaps due to the wisdom or laziness of age (or both) that BOULOS, this time, has accepted the help of several co-authors? However this be, the result is convincing. I have made good use of the *Compositae* account, co-authored by Nicholas HIND, when editing that family for Euro+Med Plant Base and preparing the long overdue 2nd volume of Med-Checklist, and I was pleased with the clarity and quality of the information I found. *Compositae* are, of course, by far the largest and most complex family of this volume, of which they make up more than half of the total bulk. *Scrophulariaceae*, the second largest family *ex aequo* with *Labiatae*, have Britt SNOGERUP as co-author, and one of the larger genera, *Plantago*, her husband Sven. Finally, Nigel HEPPER is the sole author of *Solanaceae*.

This well written, well illustrated and user-oriented Flora fulfils a real practical need. I do hope, optimist as I am, to hold the final volume in hands before the end of the current year. W.G.

29. Shaukat Ali CHAUDHARY (ed.) – Flora of the Kingdom of Saudi Arabia illustrated. Volume II (Part 1); Volume III. – Ministry of Agriculture and Water, National Agriculture and Water Research Center, National Herbarium, Riyadh, 2001. [5] + V + 675; [1] + VI + 368 pages, 296 + 104 plates of drawings, 14 plates of colour photographs, 1 + 1 folded colour map, tables; 2 volumes with laminated cover.

The earlier volumes of this Flora have been presented lately (OPTIMA Newslett. 36: (18)-(19). 2002). The two parts now before us maintain the style and quality standards of the earlier ones, and again the National Herbarium of Saudi Arabia and in the Ministry of Agriculture and Water that supports it can be congratulated on the outcome.

Volume 2(1) treats the last portion of the dialypetalous families of Engler's system, from the papilionaceous legumes to the umbels. Volume 3 is devoted to the monocots but excludes grasses, which had been treated in a volume of their own that is not formally part of the Flora and differs in style and format (S. A. CHAUDHARY, Grasses of Saudi Arabia. Riyadh, 1989). At the end there is a general index to the Flora as a whole.

Volume 2(1) includes the valid naming of a newly described species (*Pycnocycla sheilae* Chaudhary); another new species, *Melhania jaberii* S. Abedin, is mentioned in vol. 3 – but as the Latin text for it is not in any way descriptive or diagnostic, it is best considered as a *nomen nudum*. Other new species mentioned in either book have been described and validly named elsewhere. The harvest of taxonomic novelties brought to light by the authors of this Flora is, therefore, quite noticeable. Its most outstanding feature, though, is illustration: not so much the colour photographs of *Aloe*, which are rather disappointing, as the numerous, instructive drawings by a gifted botanical artist, Mohammad RAFIQUD DIN.

This might be the moment to applaud the completion of yet another national Flora of the Mediterranean-Oriental region; but I shall postpone the applause – not because of the (deliberate?) gap concerning the *Gramineae*, but due to the "missing" volume 2(2). The introduction to vol. 2(1), dated 30 June 2000, claims that vol. 2(2) had been "sent to the press ... a long time ago"; it is indeed covered by the consolidated index in vol. 3, with page references; some treatments *(Sarcostemma, Ceropegia)* are cited in bibliographies as from 2002; and a revised version of the *Verbascum* treatment, with 8 additional species, is among the updatings in vol. 3. Yet until a fortnight ago vol. 2(2), to all available evidence, was only a phantom. No sales catalogue listed it as available, no one I know of had ever seen it, no online library catalogue mentioned it. Latest news, KOELTZ was supplied some copies at the end of June 2004. But I yet have to see one! W.G.

30. **Mostafa ASSADI, Maboubeh KHATAMSAZ & Ali Asghar MAASSOUMI (ed.) – Flora of Iran. No. 37:** *Valerianaceae,* by E. MOUSSAVI-ALLASHLOU (ISBN 964-473-100-X); **No. 38:** *Chenopodiaceae,* by Mostafa ASSADI (ISBN 964-473-113-1); **No. 39:** *Boraginaceae,* by Maboubeh KHATAMSAZ (ISBN 964-473-132-8); **No. 40:** *Convolvulaceae,* by M. NOWROOZI (ISBN 964-473-133-6); **No. 41:** *Apocynaceae,* by M. DINARVAND (ISBN 964-473-142-5); **No. 42:** *Typhaceae,* by Mahdi HAMDI & Mostafa ASSADI (ISBN 964-473-160-3); Research Institute of Forests and Rangelands, [Tehran], 2001 [37-38], 2002 [39-41], 2003 [42]. 56 + [2], 508 + [2], 504 + [2], 110 + [2], 21 + [2], 32 + [2] pages, 10, 138, 142, 28, 5, 12 drawings, 28, 183, 215, 43, 8, 12 maps; paper.

31. **Mostafa ASSADI & Ali Asghar MAASSOUMI (ed.) – Flora of Iran. No. 43:** *Papilionaceae* (*Astragalus* I), by Ali Asghar MAASSOUMI (ISBN 964-473-182-4). – Research Institute of Forests and Rangelands, [Tehran], 2003. 386 + [2] pages, 25 drawings, 218 maps; paper.

During the past two years Flora of Iran has made a giant step ahead. Three of the 7 fascicles published are of substantial size and concern major families: *Chenopodiaceae, Boraginaceae,* and *Leguminosae* (*Astragalus* in part), with almost 600 accepted species and 1400 printed pages in total. The *Chenopodiaceae* treatment is particularly innovative, as documented by one newly described species and 11 new combinations, reflecting both a reasonably wide species concept and an improved understanding of generic delimitation. Of the 41 included genera only one (*Salsola,* 40 species) is really large.

The treatment of *Boraginaceae* is more conservative, with a single new combination. It adopts a fashionably if perhaps excessively narrow genus concept in the *Cynoglosseae,* largely based on fruit characters. The two major genera, each with over 30 species, are *Onosma* and *Heliotropium*.

Astragalus is the largest genus in Iran – and large groups are, as a rule, the ones that are left to the very last. It is therefore particularly pleasing to see the first portion (perhaps one fourth?) of the *Astragalus* treatment appear so soon. The book sets off with a conspectus of the 66 sections that are present in the country, followed by a key for sectional identification. Then follow the accounts of 24 sections with 209 species and 11 additional subspecies. It is not quite clear how the portioning of the genus is being operated. Assuming, as we must, that the sequence of the sections in the synopsis is a natural one, then the present selection is artificial, as it comprises sections Nos. 1-11, 13-17, 34, and 48-54. It covers all annual sections plus 12 perennial ones with basifixed hairs (1-11, 34). Contrary to the Flora's general style there are few illustrations, and most of these are of analytical details such as hairs or single fruits, apparently because the drawings of MAASSOUMI'S *Illustrated guide* (see item 8, above), representing whole plants, is to serve as a complement to the present treatment. However, many of the sections presented here have not yet been covered to date in the *Illustrated guide.*

Of the remaining families, let me mention *Convolvulaceae* (in the strict sense, *i.e.,* excluding *Cuscuta*), of which *Convolvulus* (39 species) is the third largest genus of the present batch; and *Typhaceae,* with the single genus *Typha,* which under a fairly narrow taxonomic concept counts no less than 12 species in Iran, two of which are described as new. W.G.

Interactive Identification Aids

32. **Siegmund SEYBOLD (ed.) – Schmeil-Fitschen Interaktiv.** Die umfassende Bestimmungs- und Informationsdatenbank der Pflanzenwelt Deutschlands und angrenzender Länder. – Quelle & Meyer, Wiebelsheim, 2002 (ISBN 3-494-01327-6). CD-ROM with 16 pages of printed introduction; plastic sheath in cardboard box. Price: 50 €.

The German school flora created by Otto SCHMEIL and Jost FITSCHEN in 1903 has been with us for a century now, has gone through the awesome number of 92 editions or printings – and is still Germany's most popular plant identification book for use in the class or in private. Its going electronic is undoubtedly the single major change it has undergone since it first came to light.

The publishers, editor and software designers did a remarkable job, and what you get in the tiny bulk of a single CD [in an oversize cardboard box, regrettably] is well worth its money. You

will need modern equipment if you want to be happy with it, though: a recent version of MS Windows, a quick and powerful processor unit, high-resolution screen, adequate memory and disk space, and the Internet Explorer. Taking this for granted, the setup process should pose no problem (but will take some time). At lest it worked smoothly in my case, except that no re-booting instruction was displayed at the end although rebooting was necessary.

Once installed, the programme runs smoothly and is remarkably quick to respond. You will need to get acquainted with it to profit fully of its possibilities; and you are well advised to customise it to your preferences (e.g. by selecting the most agreeable print size, and by switching off the bit of VIVALDI playing each time at the start that will otherwise drive you crazy). After a little while, you will have the whole flora of Germany and neighbouring countries at your fingertips – not only the contents of the printed Flora but the whole associated picture gallery and databased information on items such as conservation status (by individual Länder), ecological indicator values, chromosome numbers, vernacular names, whatever. You have the option to first identify your plant or, if you know its name, to look directly at the information (or at selected information fields). And there are the pictures: gorgeous colour photographs, highly resolved, with not only the author but often the locality and date at which the picture was taken. Not every species is so illustrated, but most are – if only at times by a good herbarium specimen.

This is a good new tool, and a good step forward into a bright future. Naturally it is not yet perfect. One disappointing feature is that the maps associated with the distribution statements for each species are not functional: an invariable base map is displayed, and you have to use your own imagination to fill it in. Some will frown at the identification procedure: the key is monothetic and dichotomic, not of the multistate multiple access type that electronic data processing allows. Come to think of it, one is probably better off with the traditional procedure (those keys have been tested and improved by generations of school teachers and field botanists, and they do work) than with an entirely new one full of bugs and pitfalls. To compensate the single-access limitation, the system offers a choice between keys for specimens in flower and in leaf, and in the case of deciduous woody plants, even of leafless individuals.

Too many different options are incorporated in this system to allow for a detailed description of them all. There is one aspect, however, that I do not want to forego: the free option to insert notes. I still have to try it out, but it is a fascinating idea to shape one's own, individual, personally annotated copy of a work of this kind – without having to disfigure a printed book (kind of a cult object to me) by pencilling or, worse, inking in one's thoughts and findings. W.G.

33. Erich GÖTZ – Pflanzen bestimmen mit dem PC. Farn- und Blütenpflanzen Deutschlands. 3300 farbige Pflanzenfotos. [ed. 2]. – Ulmer, Stuttgart, 2003 (ISBN 3-8001-4260-0). CD-ROM with 24 pages of printed introduction; plastic sheath. Price: 34.90 €.

When I reviewed the first version of this CD-based identification aid for the plants of Germany I was rather severe (see OPTIMA Newslett. 36: (12)-(13). 2002). I freely admit that some of the shortcomings I then pointed out have been eliminated in the present remake. No more qualms with the set-up procedure, good marks for user-friendliness, and a self-explanatory interface. Contrary to the SCHMEIL-FITSCHEN system just reviewed, GÖTZ's does use polythetic keys with multiple access option. Identification down to species level can be extremely rapid (in *Anemone ranunculoides*, the example given, it is achieved in merely 4 steps) – if it functions at all. Because the basic weakness of the work persists: few data, few characters, few criteria. In any groups that are in the least critical (supposing that they are not timidly left at the aggregate level, as is often the case) you still end up with lengthy species lists when all available questions are exhausted, sometimes even with two or three genera left.

This work is not, I would say, suited for the average botanical layman. You can use it as a complement and mnemonic aid if you already are a freak, or as a first and easy approach if you are a beginner; but if you then want to go on and learn your flora critically this device will turn you off rather than be helpful. Except, I am bound to add, in one important respect.

That new asset is illustration. Not of course the awfully primitive, misleading little scribbles that are complementing the keys in stead of a

glossary, but the colour photographs illustrating a large majority of the species. They are all taken from the excellent manual of Haeupler & MUER (see OPTIMA Newslett. 36: (11)-(12). 2002) and are presented in a very expedient and practical way. They shine up as a thumbnail selection when the species name is displayed, with a two-level standard enlargement option and, in addition, a very functional way of selective zooming-in (resolution permitting). Personally, in the event that I should make use of this CD at all, I can assure you that it will be exclusively for the sake of these pictures. W.G.

Popular Books

34. Ruprecht DÜLL & Irene DÜLL – Geheimnisse der Mittelmeerflora. Bemerkenswertes zur Biologie, zum Nutzen und zur Mythologie von Mittelmeerpflanzen. – IDH-Verlag, Bad Münstereifel, 2003 (ISBN 3-925425-19-5). [3] + 304 pages, laminated cover. Price: 30 €.

The book intends to fill a gap in the rich literature on Mediterranean wildflowers that is currently available. It has been written to serve as a complement to the extant flower books, and also to the floras and other identification aids, duplicating neither as it has no keys and lacks illustrations. What it concentrates on are data on the biology, uses, ethnobotany, and etymology of plant names, complemented by the description of morphological features; all this for a selection of showy plants that grow in the wild or in cultivation in Mediterranean countries.

The book might well meet with success, even though its being written in German is a handicap. It has, however, severe shortcomings. I am not referring to the criteria for the selection of the treated plants, which is an intractable problem unlikely to ever be resolved to everyone's content. One might have wished a more Mediterranean-centred sample in a book of which the title translates as "Secrets of the Mediterranean flora", and may thus be astonished to find full entries for *Cereus*, *Brugmansia* and *Casuarina* – but these are plants that tourists do encounter in southern Europe, and which they will likely find exciting and be curious about.

The reason for my criticism is a different one. When leafing through the book one will immediately note numerous inaccuracies and plain errors that make one wonder how reliable the less easily falsifiable contents may be (verification is made difficult by the lack of cited sources of information). Let me give some examples of such mistakes, in the sequence in which they shine up. *Cupressus* is not a member of the mountain conifer belt (p. 4) but primarily a lowland tree. *Quercus ilex*, contrary to *Q. coccifera*, does not respond to grazing by acquiring a shrubby habit (p. 5). Qualifying *Orobanche* as "parasitic geophytes" (p. 13) is misleading, as several species have an annual life cycle. Similarly, *Limodorum* is not usually considered a parasite (nor is *Epipactis* a hemiparasite; p. 16), and the assumption that these plants "parasitize" their mycorrhizal fungi (p. 150) is debatable at best. *Ceratonia siliqua* is not a typical bat-pollinated plant (neither is *Cercis*), and is certainly not of North African origin (p. 20). *Aristolochia* flowers do not offer shelter to visitors (p. 21) but are pollination traps (p. 27). *Viscum* dispersal is not transitional between stomatochorous and mixochorous (p. 35-36) but typically and obligatorily endo-ornithochorous. Corinthian capital ornaments feature leaves of *Acanthus mollis*, not *A. spinosus* (p. 42). *Alkanna tuberculata* (Forssk.) Meikle (p. 45) is an illegitimate later homonym, the correct name is *A. tinctoria* Tausch. The genus *Dittrichia* is not named for "Gustav DITTRICH, born 1875" (p. 107), but for Manfred DITTRICH (* 1934). And THEOPHRASTOS was not Alexander the Great's pupil (p. 284) but his mentor.

Each of these mistakes may by itself be excusable, but the bulk of them is not. If the book has indeed discovered an ecological niche of its own it does not fill it. It is, optimistically, designated as first edition; so we may better await the implicitly announced subsequent one before buying it. W.G.

Botanical Calendars and Postcards

35. Pietro MINISSALE & Salvatore BRULLO – Calendario 2002. Specie endemiche di Sicilia. – Dipartimento di Botanica dell'Università degli Studi di Catania, Catania, [2001]. 12 calendar sheets + front cover sheet, each with monochrome drawing on recto and text on verso; ring binding.

The 13 drawings in this calendar, complete with habit and analytical details, represent *Ophrys calliantha, Allium lopadusanum, Arrhenatherum nebrodense, Campanula marcenoi, Desmazeria pignattii, Genista demarcoi, Puccinellia gussonei, Quercus ×fontanesii, Salix gussonei, Silene hicesiae, Suaeda pelagica, Valantia deltoidea,* and *Zelkova sicula*. All are by Salvatore BRULLO himself, and most if not all have been published elsewhere before, in journals such as *Botaniska notiser, Candollea, Flora mediterranea, Lagascalia, Webbia,* and *Willdenowia* (whether they are here reproduced by permission remains obscure). The text on the verso of each sheet consists of a description followed by notes on distribution, phenology, ecology, and a concise bibliography. W.G.

36. Amedeo FALCI – *Ophrys* di Sicilia 2003 [*Calendario* No. **3**]. – Paruzzo, Caltanissetta, [2002]. 12 calendar sheets + 2 front cover sheets, 13 colour photographs; cardboard back, ring binding.

According to the author's (perhaps excessively narrow) taxonomic concept, 30 species of *Ophrys* are present in Sicily, half of which are endemic to the island. The calendar sheets represent 12 of these endemics, one of them yet to be formally described and named: *O. obaesa, flammeola, laurensis, cephaloeditana (nom. prov.), mirabilis, biancae, oxyrrhynchos, explanata, lunulata, pallida, archimedea,* and *calliantha*. They are shown in superb, outsize (37 × 48 cm) colour photographs, mostly flower close-ups, each with the date and locality of the take noted. Only the unnamed cover photograph (obviously again of *O. oxyrrhynchos*) lacks such details. The calendar is an unique documentation of some of the rarest and least known representatives of the island's *Ophrys* taxa. W.G.

37. Pietro PAVONE – Orto Botanico. 2004. – Dipartimento di Botanica dell'Università degli Studi di Catania, Catania, [2003]. 6 calendar sheets + front and back cover sheets, 12 + 12 facsimiles in colour; ring binding.

The calendar consists of facsimiles of 12 of the 60 plates in Gaetano SAVI's book *Materia medica vegetabile toscana,* representing common medicinal plants growing in Tuscany. They are reproduced in recto-verso print, and again in thumbnail disposition on the cover sheet, from the hand-coloured copy of the book kept in the Botany Department of Catania University. W.G.

38. Roman BUSINSKÝ – Nastěnný kalendář Kvě ty Kazkazu 2004. – Delonix regia, Praha, [2003]. 12 calendar sheets + front cover sheet + explanation sheet, 13 + 12 + 24 colour photographs; cardboard back, ring binding.

BUSINSKÝ, itinerant Czech botanist and gifted photographer, has travelled extensively throughout Asia and as far as New Caledonia. Here he presents us with a gorgeous selection of large-size (41 × 23 cm) Caucasian flower photographs, five *(Fritillaria latifolia, Primula juliae, Centaurea* [or *Cyanus*] *fischeri, Gentiana oschtenica, Gypsophila tenuifolia)* from the western Caucasus, seven *(Rhododendron caucasicum, Nonea intermedia, Erythronium caucasicum, Primula amoena, P. algida, Arnebia pulchra, Pedicularis crassirostris)* from Azerbaidjan in the south-eastern part of the range, and one (*Pulsatilla aurea*, on the cover sheet) from Georgia in the centre. In addition, each calendar sheet bears a smaller picture of a fitting landscape underneath. All photographs (reproduced in thumbnail size) are suitably explained in quadrilingual (Czech, German, Dutch and English) captions. W.G.

39. Artemios YANNITSAROS & Ioannis BAZOS – Futa tês Lesvou. Plants of Lesvos. – Ethnikon kai Kapodistriakon Panepistêmion Athênôn & Syllogê Fusikês Istorias Vrisas, Vrisa, 2002. 12 loose colour postcards with printed text on verso, in cardboard folder.

A nice series of postcards, better suited for documentary purposes than for the mail. Half of the verso is filled with printed explanatory text (bilingual: Greek and English), so if you want to add any message beyond the sheer address you have to use an envelope. Some of the pictures are of widespread species, but others feature oriental taxa at the western limit of their distributional range (in particular: *Centaurea urvillei, Iris orientalis, Rhododendron luteum* in its single Greek locality), or rare, subendemic *(Haplophyllum megalanthum)* or endemic ones *(Alyssum lesbiacum).* W.G.

Floristic Inventories and Checklists

40. Isaac IZQUIERDO ZAMORA, José Luis MARTÍN ESQUIVEL, Nieves ZURITA PÉREZ & Manuel ARECHAVALETA HERNÁNDEZ (ed.) – Lista de especies silvestres de Canarias (hongos, plantas y animales terrestres) 2001. – Gobierno de Canarias, Consejería de Política Territorial y Medio Ambiente, La Laguna, 2001. 437 pages, tables, 6 coloured graphs; 1 hard cover volume with 1 CD-ROM ("Banco de datos de biodiversidad de Canarias").

A remarkable achievement: In June 1998 the government of the Canary Islands started the BIOTA programme to design and implement a database on the Islands' biological diversity, one year later it decided to go ahead with the implementation phase, and by the end of 2001 the present volume, first spin-off of that very database, was ready! It covers in checklist format, with island-by-island distributions, the whole terrestrial flora and fauna of the archipelago (obviously including freshwater taxa) with the exception of the protists, algae, non-annelid worms and cnidarians – groups for which the reliability of the data at hand was not judged to be sufficient for release but which, we are promised, will be added to the next edition.

The numbers are impressive: 12,661 species plus 936 additional subspecies, with a species endemism of 28 %. In species numbers arthropods (54 %) are of course the dominant group, followed at a distance by fungi and lichens (23 %), vascular plants (16 %) and bryophytes (4 %). Regarding fungi, the introduction states that epizootic taxa are excluded, and indeed their coverage is poor, yet a few (e.g. two species of insect-parasitic *Laboulbeniales*) are listed.

The CD-ROM included in the book reproduces the printed text identically, in PDF format, but is fully searchable, which with a work of this kind is a blessing. Once the first, tedious run has been performed the display of search results is almost immediate. The single bad mark is for the plastic pouch sheltering the disk, which becomes sticky and adhesive and is better immediately discarded and replaced by a more suitable cover.

The reader is told little of the database system used and the kind of data stored, except that locality data are referenced to a grid with meshes of 500 metres square, so one may expect one day to get detailed distribution maps as one of the possible outputs. The presently held data are taken primarily if not exclusively from published sources, but one may reasonably assume that with time specimen and field data will be added, and perhaps images as well. In fact, there is no end to the exciting services one may imagine, all of which, we are promised, will be made freely available. In this respect, too, the Canarian BIOTA programme is exemplary in following the free-accessibility precepts of the Global Biodiversity Information Facility, of which it is one of the very first operational implementations. W.G.

41. Benito VALDÉS, Moh REJDALI, Ahmed ACHHAL EL KADMIRI, Stephen L. JURY & Josep Maria MONTSERRAT (ed.) – Catalogue des plantes vasculaires du nord du Maroc, incluant des clefs de détermination. **Checklist of vascular plants of N Morocco** with identification keys. [*Biblioteca de Ciencias*, **1-2**.] – Universidad de Sevilla, Institut Agronomique et Vétérinaire Hassan II, Universiy of Reading & Institut Botànic de Barcelona, Madrid, "2002" [2003] (ISBN 84-00-08071-8 [both volumes], 84-00-08072-6 [vol. 1], 84-00-08073-4 [vol. 2]). XI + V + XI + 1007 pages, 2 maps, 2 paper bound volumes.

An unusual checklist in several respects, all of which turn to its advantage. First of all, it includes full keys, from family level down to variety; second, it has been published at one stroke, without leaving people awaiting a continuation or completion for years (ashes on my head, thinking of *Med-Checklist*!); third, it is based primarily on the study of actual specimens, even though reliable literature records have not been ignored; finally it is the result of the joint efforts of no less than 94 experts from 12 different countries, among which Morocco, Spain and Britain, where the editorial team is based, naturally predominate. If there has ever been a checklist that can claim to be built on a sound and rigorous scientific basis, then here it is.

The present work takes its roots in the plan of a *Flora betico-rifaea*, proposed by Emilio GALIANO of Sevilla in 1987, to which several Moroccan and S. Spanish institutions plus the Conservatoire botanique of Geneva were then committed. That plan never came to bear. When

efforts to get funding failed Geneva completely withdrew (to the extent that now the G herbarium is not even acknowledged as a source of information!), but in its stead Reading and Barcelona stepped in. Together with Rabat and Sevilla they launched the project of a North Moroccan checklist as an offshoot of the former amphimediterranean Flora scheme. When in 1992 the European Union accepted to fund the project, it started with a big collecting campaign that, in four years, yielded a harvest of about 30,000 gatherings from the area, deposited in Rabat and mostly duplicated in the other participating herbaria. This material is the present Checklist's actual backbone.

The subject covered are vascular plant taxa of an area centred on the Rif mountains, delimited by the Moroccan coastline to the north, and to the south by the Atlas chain (of which only in isolated northern outlier, Jbel Tazzeka, is included) and a line running roughly from Fes to Salé on the Atlantic coast. The territory is subdivided into 20 natural areas, which are used to outline the detailed distribution of each taxon. Nomenclatural sources are cited carefully and in a modern, standardised format. Particular care has been devoted to the verification of synonyms. Most importantly, a large number of critical, often doubtful taxa described by brother SENNEN and his fellow botanists have been critically reassessed. The whole book – introductory chapters, keys and glossary – is bilingual (French and English), with the exception of the distribution statements which, being self-explanatory, are in French only.

Any qualms? Let me think hard. There is a minor slip (which one of the editors pointed out to me) concerning the authorship of *Cuscutaceae* (correctly stated to be by GARCÍA GARCÍA) as opposed to the coextensive *Cuscuta* (wrongly attributed to JURY). There is the absence of statistical data such as numbers of taxa and rates of endemism: If you are interested in such figures you will have to do your own manual count, for which admittedly I was too lazy. There is finally, somewhat awkwardly, the lack of a bibliography. In an inventory that was based at least in part on an inventory with about 25,000 literature records from 71 papers, one would certainly expect a list of references to the latter. Well – "rien n'est parfait" (to quote the fox's sigh in one of my favourites, SAINT-EXUPÉRI's *Little prince*). W.G.

42. Josep VIGO, Ignasi SORIANO, Jordi CARRERAS, Pere AYMERICH, Empar CARRILLO, Xavier FONT, Ramon M. MASALLES & Josep M. NINOT – Flora del Parc Natural del Cadí-Moixeró i de les serres veïnes (Prepirineus orientals ibèrics). [*Monografies del Museu de Ciències Naturals* (ISSN 1695-8950), **1**.] – Ajuntament de Barcelona, Institut de Cultura de Barcelona, Barcelona, 2003. 407 pages, 12 tables, 6 figures, c. 1600 distribution maps, 69 colour photographs; paper.

The territory covered by the present checklist lies roughly in the centre of the pre-Pyrenees of N. Catalonia, being circumscribed in a rectangle with La Seu d'Urgell at its north-western corner: a mountain area of about 885 km^2, peaking at 2648 m in Mt Vulturó, Sierra del Cadí. It is covered almost completely by published vegetation maps of the *Mapa de vegetació de Catalunya* series, at a scale of 1 : 50,000 (sheets 216, 217, 254 and 255, reviewed previously in this column). A portion of the eastern half of the area is also comprised in the vegetation map at the same scale that accompanies VIGO's 1996 book *El poblament vegetal de la Vall de Ribes* (see OPTIMA Newslett. 32: (19). 1997). These maps and the accompanying explanatory texts result from an extensive exploration campaign focusing on this formerly little known area, by an important team, mainly of Barcelona University botanists, which started the end of the seventies and lasted for over two decades. The present checklist is another such result.

The checklist proper, which makes up the larger part of the book, lists 1547 spontaneous vascular plant species plus 87 infraspecific taxa, 17 interspecific hybrids and 56 hybrids. For each recognised taxon the ecology, phytosociology, local distribution and frequency are mentioned, and a little map shows its occurrence in the 19 squares of 10 × 10 km into which the area is divided. Much of the chorological information can be found elsewhere, especially in the published volumes of the *Atlas corològic de la flora vascular dels Països Catalans* (regularly reviewed in this column), which uses the same mapping grid. This is, however, the first time it is published in context.

The book includes concise general chapters on the natural environment and vegetation of the area, its salient floristic features, rare and threat-

ened species. It includes a synthetic vegetation map in colour, spread over two pages, and nice if not brilliantly reproduced pictures of landscapes and plants. A feature that is conspicuously lacking is a map of the various protected areas (natural parks, nature reserves and natural interest sites) that make up the total territory, and a statement on the degree to which they are protected. W.G.

43. Guido MOGGI – Catalogo della flora del Cilento. Repertorio delle piante vascolari finora segnalate e problemi sistematici connessi. [*Informatore Botanico Italiano* **33,** *Supplemento* **3**.] – Società Botanica Italiana, Firenze, 2002. 116 pages, 4 maps, 12 extra plates with 32 colour photographs; laminated cover.

Cilento is situated in the southern part of the region of Campania and, within it, of Salerno Province. It is so to say a split-off portion of the Apennines; a mountainous area that in its highest peaks skirts 1900 m of altitude but is separated from the main Apenninic chains by a deep cut longitudinal valley. It protrudes into the Tyrrhenian Sea as a large peninsular outcrop, between the gulfs of Salerno and Policastro. Due to its isolated geographical position, lack of infrastructure and difficult access roads it is still barely touched by the blessings of modern development and keeps intact its natural beauty and originality.

Guido MOGGI first travelled to Cilento in 1951 and must have fallen for it immediately. Within 50 years he visited the area no less than 29 times, spending almost five months in the field; he authored or co-authored 15 publications on Cilento botany; and yet, as he himself acknowledges, the flora of the region is still inadequately known!

The present inventory is based on an exhaustive screening of published sources: 162 in total, not counting half a dozen items of grey literature (excursion accounts with plant lists). Amazingly, no herbaria have been screened for unpublished records, and even MOGGI's own gathering kept in Firenze – supposing he did not publish them all – are not mentioned as such. This is also one reason, obviously, that a rather high proportion of recorded taxa are uncertain to some degree. To be precise, of the 1963 taxa (species and subspecies) of MOGGI's floristic inventory only about 1750 are confirmed members of the wild flora; the remainder are either cultivated only, or likely recorded in error, or unconfirmed in recent times.

This critical enumeration is at the same time the apotheosis of a lifetime's dedicated endeavour and a starting point on which future work can be safely based. It is also, not least thanks to its nice colour photographs of plants and landscapes, the best conceivable incentive for triggering young, keen floristic explorers into action. W.G.

44. Zbigniew MIREK, Halina PIĘKOŚ-MIRKOWA, Adam ZAJĄC & Maria ZAJĄC – Flowering plants and Pteridophytes of Poland. A checklist. Krytyczna lista roślin naczyniowych Polski. [*Biodiversity of Poland*, **1**.] – Polish Academy of Sciences, W. Szafer Institute of Botany, Kraków, 2002 (ISBN 83-85444-83-1). 442 pages, 3 full-page drawings; paper.

This attractive and carefully edited checklist is the unacknowledged second edition of *Vascular plants of Poland, a checklist*, published in 1995 by the same author team. The new version includes more than 4800 taxa (species and subspecies), a very high number for a northerly country like Poland, which is partly explained by the narrow taxonomic concepts adopted, and partly by the very high number of casual aliens and cultivated plants that were taken into consideration. When restricted to native and naturalised taxa, the list is still long but taxon number (less than 3000) is closer to normal expectations. *Taraxacum* (15 pages!) is by far the largest genus, well ahead of *Rubus* and *Hieracium*, in order, and the only one in which sectional affiliation is specified (the prefix "E", it is explained, stands for *Erythrosperma* – but in fact in the list itself "Es" is used instead).

The book is fully bilingual (Polish and English), which is particularly welcome for the innumerable (almost 1000!) endnotes in which a wealth of accessory information on occurrence, status etc. is provided. Polish names (most often "artificial" ones, formed from the translation of the scientific Latin names) are provided for all accepted taxa, and separately indexed. Synonymy is rather scant and treated in a stepmotherly way, in so far as synonyms are referenced to the accepted name but cannot be retrieved when one starts from the latter. Apart from this stricture, however, the book deserves ample pride. W.G.

Excursions

45. Octavio RODRÍGUEZ DELGADO (ed.) – Apuntes sobre flora y vegetación de Gran Canaria (Guía de la excursión geobotánica de las XIX Jornadas de Fitosociología y Simposio Internacional de la FIP 2003). – Cabildo de Gran Canaria, Medio Ambiente y Aguas, s.l., 2003 (ISBN 84-8103-360-x). 271 pages, tables, figures, graphs, maps and photographs (mostly in colour); laminated cover.

This is arguably the most voluminous and most informative guide book ever written for a single-day excursion. That event took place on 18 September 2003 and led to Gran Canaria the participants in the symposium of the International Federation of Phytosociology, held in the neighbouring island of Tenerife. It consisted of a return trip by fast-ferry boat, some socio-cultural and sightseeing items, and a total of four botanical stops. The excursion guide proper comprises 23 pages, i.e., about 15 % of the total volume. The remainder is a full-scale treatise on the botany and natural history of Gran Canaria.

The initial chapter, and a very readable one indeed, is by Wolf WILDPRET and is an historical introduction to the subject, including extensive quotations from an unpublished manuscript by Gregorio CHIL Y NARANJO on the evolution of the Island's plant cover between 1777 and 1872: an important but so far overlooked document on the early human impact on the biota of Gran Canaria. The subsequent chapters deal with the physical environment and bioclimate, flora and vegetation, threatened species and protected areas, anthropogenic changes and relevant bibliography. There is a particular section, by Octavio RODRÍGUEZ DELGADO, on the Botanic Garden "Viera y Clavijo" in Tafira Alta, well known for its endeavour in conserving the Island's rare and threatened endemic species, and celebrating its 50th anniversary by that very occasion.

The fourth chapter includes a full list of the 1363 wild-growing taxa (species and subspecies) of Gran Canaria's vascular flora, in which the Macaronesian, Canarian and Island endemics (which sum up to a total of 278, or 20 %) appear in different colours. (For better ease of consultation, one may wish to correct an error in page numbering: p. 60 correctly belongs between pp. 55 and 56.) W.G.

46. Ina DINTER – Cévennes. Botanische Studienreise 9.-22. Juni 2002. – Privately assembled/duplicated, Ostfildern, 2002. [1] + 76 sheets, maps, figures; paper, plastic front cover sheet.

47. Ina DINTER – Griechenland. Peloponnes. Botanische Studienreise 27. März - 11. April 2003. – Privately assembled/duplicated, Ostfildern, 2003. [1] + 44 + xi sheets, maps, figures, 3 plates with 24 colour photographs; paper, plastic front cover sheet.

48. Ina DINTER – Griechenland. Peloponnes. Botanische Studienreise – **Nachbearbeitung.** 27. März - 11. April 2003. – Privately produced, Ostfildern, 2003. CD-ROM.

49. Ina DINTER – Rhodos, Griechenland. Botanischer Studienaufenthalt 19. April - 3. Mai 2001. **Pflanzenliste.** – Privately duplicated, Ostfildern, 2001. [1] + 10 sheets; stapled.

50. Ina DINTER – Zypern. Die Insel, wo die Götter Urlaub machen. Botanischer Studienaufenthalt 14.-29. März 2002. – Privately assembled/duplicated, Ostfildern, 2003. 81 sheets, maps, figures, 3 plates with 24 colour photographs; paper, plastic front cover sheet.

51. Ina DINTER – Zypern. Insel der Götter. Botanischer Studienaufenthalt 14.-29. März 2002. **Pflanzenliste.** – Privately duplicated, Ostfildern, 2002. [5] sheets; stapled.

On many previous occasions have I presented Ina DINTER's excursion guides to the various parts of southern Europe in this column. Let me reiterate here that, whereas each of them is unique in its individual features, they all used to follow the same basic pattern: A first "edition" was given to participants for use during the excursion, based on the reconnoitring tours that Mrs. Dinter invariably undertakes in the preceding year or years; and a second so-called "elaboration" was subsequently prepared and distributed, taking into account the plants actually encountered during the excursion.

This pattern is now gradually changing. At first, the "elaboration" became reduced in size and contents to a cumulative list of observed and collected plants (as in the case of the Rhodes excursion, of which the guide booklet was presented as No. 40 in the last issue of this column), or to a mere enumeration of specimens collected

and pictures taken (as in the case of Cyprus), or it was not prepared at all (as appears to have happened for the Cévennes). An then, quite recently, the "elaboration" was greatly expanded and distributed as a CD-ROM, no longer as hard, printed copy. *Tempora mutantur* – and those of us who, like Mrs. DINTER, keep feeling young adapt to the changing fashion.

Within the last two years three new excursion areas have been "conquered" by Mrs. DINTER: southern Cyprus in March 2002 (the northern part of the island had been visited in 1996: see OPTIMA Newslett. 31: (12)-(13) 1997 and 32: (13). 1997); the Cévennes of southern France in June 2002; and the Peloponnesus in March/April 2003. In the two former guide booklets one will look in vain for the customary, detailed maps with itineraries and collecting localities; the third has no cumulative plant list; all three, as usual, include interesting information on noteworthy features of the landscape and physical environment, culture and inhabitants, etc.

Illustration is usually a point of note, especially when it includes previously unpublished images by the author. Whereas no plants at all are shown for the Cévennes, and while for Cyprus botanical illustration is restricted to a selection of plates from Desmond Meikle's Flora, the Peloponnesus booklet includes three plates with 24 quite brilliantly reproduced, original colour photographs, most of which show rare and interesting species of wildflowers. This selection, however, is only an appetizer when compared to what the CD "elaboration" brings: 111 high-resolution colour photographs, all taken during the excursion, representing 49 different species! This, assuredly, is one of the blessings of the digital revolution of our time: Could you have imagined, a few years ago, to make so easily available pictures that, alone, occupy a wasteful 520 megabytes of memory space? W.G.

52. Walter STRASSER – Botanische Studien auf den Inseln Lesbos und Chios. – Privately published, Steffisburg, 2002. [2] + 64 pages, 5 tables, 112 drawings; paper.

Same as the two previous publications by Walter STRASSER reviewed in this column, dealing with the Greek island of Lefkas and with western Turkey (see OPTIMA Newslett. 36: (26). 2002), the present pamphlet is, so to say, a Siamese twin. On one hand it is a tabular listing of plants observed or collected on a group excursion to the E. Aegean islands of Lesvos and Chios, in spring 2002, and as such it follows the familiar pattern and format of several earlier lists by the same author. On the other hand, it is designed as a complement to STRASSER's illustrated field identification guide for the Peloponnesus (see OPTIMA Newsletter 34: (5-6). 1999), as it includes a series of the author's familiar, artless but useful little drawings, showing plants found on Lesvos and Chios but absent from the Peloponnesus.

In total, 112 such additional plants are here portrayed, artificially grouped in the customary way (mostly by flower colour). For each (except, inexplicably, the 20 first) there is a statement of its occurrence on various East Aegean islands plus Crete (note that, e.g., the Cretan occurrence of *Aristolochia parvifolia* is ignored). These are mere sketches, jotted down in obvious haste, but they testify to STRASSER's skill to recognisably portray a plant's likeness – so much so that one can make out with confidence when a plant has been misidentified. Such is obviously the case of *"Phleum exaratum aegaeum"* (perhaps a *Lophochloa* species?) and *"Sedum pallidum bithynicum"* (combining leaves of *S. dasyphyllum* with flowers of some other taxon). W.G.

Chorology

53. Oriol de BOLÒS I CAPDEVILA, Xavier FONT I CASTELL & Josep VIGO I BONADA (ed.) – Atlas corològic de la flora vascular dels Països Catalans. Volum 12 [*ORCA: Atlas corològic*, **12**]. – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2003 (ISBN 84-7283-706-8, volume; 84-7283-625-8, set). [508] pages, maps 2800-3038; paper.

Volume 12 of this exemplary chorological atlas (for the two previous ones, see OPTIMA 36: (26)-(27). 2002) comprises 239 maps corresponding to three families: *Labiatae* (309), *Verbenaceae* (incl. *Viticaceae;* 5), and *Solanaceae* (25).

The striking feature of the present volume, to an even higher degree than of its predecessors, is stability in the names and concepts used. No new taxa worthy of recognition appear to have been described from Catalonia, or newly discovered

there, since 1990 when the *Flora manual dels Països Catalans* was published, nor did any changes in nomenclature occur that it was mandatory to accept. The only, indeed very minor shifts in taxonomic concepts concern the non-recognition of a few perhaps ill-defined subspecies *(Teucrium scordium* subsp. *scordioides*, *Stachys alopecuros* subsp. *godronii*, one of the subspecies of *Hyssopus officinalis*, and the three former ones of *Salvia verbenaca)*. In the inventory of taxa one notes four "losses", which may well correspond to cases of presumed extinction, unconfirmed identity or doubtful native status: *Teucrium pumilum* subsp. *pumilum* (presence in Catalonia based on a single, unconfirmed literature record), *Dracocephalum austriacum* (previously known from only two places in the E. Pyrenees), *Salvia viridis* and *Mandragora autumnalis* (both from a single locality in Majorca).

Each new volume of this remarkable enterprise is most welcome, and eagerly awaited by many. W.G.

Studies of Flora and Vegetation

54. Udo BOHN, Gisela GOLLUB & Christoph HETTWER – Karte der natürlichen Vegetation Europas, Maßstab 1 : 2 500 000. Legende / Karten. Map of the natural vegetation of Europe, scale 1 : 2 500 000. Legend / Maps. – Bundesamt für Naturschutz, Bonn-Bad Godesberg, 2000 (ISBN 3-7843-3809-7). 153 pages with 1 map as paper bound fascicle; 1 loose sheet, 10 folded maps in colour, 1 folded sheet with colour captions, all in cardboard folder.

The project to publish a map of the potential natural vegetation for the whole of Europe took shape in 1975 during the XII International Botanical Congress in St Petersburg (then Leningrad). It took 25 years to mature to fruition, and two of the three founding fathers, TRAUTMANN and LAVRENKO, have long since passed away, leaving Paul OZENDA as the single survivor. It is not easy to ascertain how many of the over 100 listed authors from 31 countries are still with us today, as the list makes no distinction between the living and dead. At any rate, the impressive number and spread of contributors bears witness of the large scale and international scope of the whole enterprise.

Drawing a single map to combine the varying standards and traditions of so many countries into a single, harmonious and congruent pattern is a major challenge, that has required much thought and numerous international meetings. Apart from the obvious necessity to define the vegetation units to be mapped in a coherent and generally agreed way, there was a seemingly trivial but highly emotional question to be tackled: the most appropriate choice of the mapping colours. In this, the Central European and Russian tradition eventually prevailed.

The c. 700 different mapping units (each of which, usually, is in turn a combination of various associations) are grouped together in a hierarchical system of formations, formation groups, and formation complexes, defined by vegetation physiognomy in combination with factors of the environment (temperature, soil) and geography. There are 19 formation complexes (designated by capital letters) and 54 formation groups (mapped in different tinges, with the formations expressed by different shades and patterning). The mapping units are designated by figures affixed to the formation complex letters. In addition, there are symbols designating particular plant species or small-scale vegetation types.

Sorry, all this sounds a bit chaotic, and chaotic it is indeed. If you want to unravel the complete, tightly packed information contained in the map you better ask for a special training course. You should note, also, that the information in the Legend booklet is not exhaustive and that in addition there is an explanatory volume (also available on CD-ROM), to which only a vague, cryptic reference is made here (as the Legend lacks a bibliography). There, hopefully, additional features of the map are being explained, such as the four-digit numbers appearing on the map. As it is, the maps plus Legend, while fully bilingual, are not a self-contained whole.

The main map is cut up into 9 sheets covering the whole of Europe, including ex-Soviet Transcaucasia and the East Aegean Islands of Greece, but excluding the Atlantic Islands of Spain and Portugal. In addition there is a synoptic map at a scale of 1 : 10,000,000, using different tinges and mapping units (formation group level only).

In summary: a major achievement that concludes a grandiose scheme, but that could have benefited substantially by advice from a panel representing user interests. W.G.

55. Jan JANSEN – Guia geobotánico da Serra da Estrela. – Parque Natural da Serra da Estrela, Manteigas, 2002 (ISBN 972-775-054-0). 276 pages, 146 figures (mostly colour photographs), 3 tables; laminated cover.

This book was originally written in English and published by the same publisher, also in 2002, under the title *Geobotanical guide of the Serra da Estrela*. I have not seen the English edition, only the present Portuguese translation. The author is Dutch, pursuing his PhD studies at the University of Nijmegen and living in Manteigal, Portugal, on a temporary basis.

The Serra da Estrela , situated east of Coimbra in the northern half of Portugal, is the country's highest (1993 m) and most diverse mountain massif. It is largely coextensive with the Serra da Estrela Natural Park, covering 1000 km^2, to which the book is devoted, and has always been a point of attraction for botanists. Even though the endemism proper is comparatively low and for the most part concerns infraspecific taxa, the Flora includes many species that are rarely or not at all found elsewhere in Portugal.

After an introductory chapter with notes on the physical environment, the fauna and flora, the book devotes its six main chapters to a characterisation of the plant cover of the area: the woodlands, scrub formations, meadows, wetlands, rocks, and the rural environment. Among the annexes there is a preliminary list of vascular plant taxa, with Latin and Portuguese names – among them, surprisingly, 15 *Sphagnum* species. Other lists concern the vertebrate fauna and the plant syntaxa.

The rich and varied illustration is probably the book's principal merit and makes up for almost half of its bulk. Discounting a few maps and graphs, 129 of the numbered figures (mostly in fact composite plates) consist of colour photographs of landscapes, plants and animal – no less than 469 of them, if my count is accurate! Unfortunately the quality of printing does not do full justice to the author's photographic skills. W.G.

56. Mario SANZ ELORZA & Eduardo SOBRINO VESPERINAS – Plantes vasculars del quadrat UTM 31T CF34 Cambrils. [*ORCA: Catàlegs floristics locals,* **13.**] – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2002 (ISBN 84-7283-640-1). 49 pages, maps, graphs; paper.

57. Neus VILLEGAS I ALBA – Plantes vasculars del quadrat UTM 31T DG46 i zones contigües Vidrà. [*ORCA: Catàlegs floristics locals,* **14.**] – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2002 (ISBN 84-7283-641-x). 85 pages, maps, graphs; paper.

58. Lluís de TORRES ESPUNY, Ferran ROYO PLA & Álvaro ARASA TULIESA – Plantes vasculars del quadrat UTM 31T BF81 Santa Bàrbara. [*ORCA: Catàlegs floristics locals,* **15.**] – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2003 (ISBN 84-7283-701-7). 69 pages, maps, graphs; paper.

Following the by now familiar pattern, three new floristic inventories of individual 10 × 10 km squares of the chorological mapping grid for Catalonia have been published since last time (see OPTIMA Newslett. 36: (28)-(29). 2002).

Number 13 is the first such square to be situated on the coastline of the mainland. The area around the harbour town of Cambrils is much degraded, with scant remainders of the natural vegetation along the torrent beds, in those places where they are neither misused as waste deposits nor as motor tracks. The sandy shore has been partly transformed into a series of yacht havens and for the remainder into a bathing beach. As there are no hills to speak of (the highest point barely exceeds 70 m of altitude) and as, furthermore, just over a quarter of the square is solid land, the low taxon number (499) comes as no surprise, nor does the high proportion (20 %) of aliens.

The list of No. 14 is more than twice as large (1102 taxa). It concerns a low-mountain area in a bend of the river Ter, topping at 1550 m in the Serra de Milany. In fact, the inventory extends beyond the limits of the central grid square, intruding into 6 of the neighbouring squares, which results in a 10% increase of the taxon number for an area extension of 87 %.

Last, No. 15 covers a portion of the lower Ebro valley, from the river course in the east to some limestone or dolomite hills no more than 500 m high in the west. Land use is intense over much of the area, and the alien element (15 %) is conspicuous, yet the habitats are varied and the flora, with 927 recorded taxa, is surprisingly rich.

W.G.

59. Empar CARRILLO & Josep VIGO – Mapa de vegetació de Catalunya 1 : 50 000. Isil 149 (33-8). – Institut d'Estudis Catalans, Barcelona, 2002 (ISBN 84-7283-623-1). 102 pages, graphs, tables, map, colour legend, with folded colour map by Jordi CARRERAS, Empar CARRILLO, Albert FERRÉ, Josep M. NINOT & Ignasi SORIANO; laminated cover, twin plastic pouch.

60. Empar CARRILLO, Josep GESTI & Josep VIGO – Mapa de vegetació de Catalunya 1 : 50 000. Figueres 258 (39-11), Roses 259 (40-11). – Institut d'Estudis Catalans, Barcelona, 2004 (ISBN 84-7283-727-0). 79 pages, graphs, tables, map, colour legend, with folded colour map by Jordi CARRERAS, Empar CARRILLO, Albert FERRÉ, Joan FONT, Josep GESTI, Rafael V. QUADRADA, Josep VIGO & Lluís VILAR; laminated cover, twin plastic pouch.

There we have two more pieces of that large jigsaw puzzle, the vegetation map of the Spanish Catalan Pyrenees. Six more to come before the project, started in 1983, is completed. (See OPTIMA Newslett. 36: (29)-(30). 2002).

Map sheet 149 covers a portion of the central Pyrenees, close to the north-west corner of Catalonia, crossed by the watershed between the Atlantic Ocean and the Mediterranean Sea. In the eastern half, the headwaters of the Noguera Pallaresa, pertaining to the Ebro basin, describe an arc encircling the Beret massif (Pic de Moredo, 2750 m). To the west, the Val d'Arán will eventually turn northward into the Garonne River. The frontier chain is relatively low in this sector, culminating at 2880 m in Mt. Mauberme. The geology is mixed, with schists and siliceous areas alternating with old Palaeozoic, mostly metamorphic limestone. High annual rainfall, long-lasting snow cover and lack of a conspicuous summer draught result in a Central European type of vegetation.

In sharp contrast, the area of the combined sheet 258-259 – a Mediterranean coastland at the eastern end of the Pyrenees chain – has a mild, moderately dry climate with a marked draught period in summertime. The hilly area to the north-west and north-east, nowhere attaining 700 m of altitude, consist of Palaeozoic rocks and slate, whereas the large central depression of the Empordá basin is filled with young alluvial sediments. The scant vestiges of natural vegetation belong to the Mediterranean belt. W.G.

61. Oriol de BOLÒS, Josep VIGO & Jordi CARRERAS – Mapa de la vegetació potencial de Catalunya 1 : 250 000. – Institut d'Estudis Catalans, Barcelona, 2004 (ISBN 84-7283-726-2). 93 pages, folded colour map; laminated cover, twin plastic pouch.

This may be a good place to try and explain the difference between Catalonia and the Catalan Countries. Catalonia, which is covered by the present map, is coextensive with the autonomous region of Catalonia in Spain, consisting of the four provinces of Barcelona, Gerona, Lérida and Tarragona. The "Països Catalans", to which the *Flora* and the *Chorological Atlas* refer in their title, are culturally defined. They are the lands where the Catalan nation, the people speaking the Catalan language dwell, which are more than twice as large as Catalonia proper. In addition, they include Andorra, the French department Pyrénées-Orientales, the Spanish provinces of Castellón, Valencia and Alicante as well as the Balearic Islands.

The map itself is, by necessity, much generalised, especially in its southern portion, outside the Pyrenean chains, where the scant remains of natural vegetation that are proper of the lower lands required a bold amount of generalisation. By consequence, and also by virtue of the much more pronounced differences in altitude, substratum and climate, the map is much more densely patterned in its northern, Pyrenean strip, for which as we know a small-scale set of vegetation maps also exists or is forthcoming (see the two previous items), than farther to the south. Even so, it surprises that the authors think of the potential natural vegetation of the whole area as consisting of various types of woodland. Do they really believe that the Ebro valley, one of the driest regions of Europe where, especially on a gypsum substrate, a semi-desert flora rich in old xeric element prevails, would be naturally covered by oak woods?

Among the attractive feature of this map are the insets showing the hypsometry, geology and substratum (a pity that there is no rainfall map). In this respect, and also by having an extensive English summary in the explanatory brochure, the present item closely follows the model of the 1 : 50,000 map series discussed previously. W.G.

62. Ignasi SORIANO I TOMÀS – La vegetació de la Serra de Moixeró i el Massís de la Tosa d'Alp (Pirineus Orientals). [*Acta botanica*

barcinonensia (ISSN 0210-7597), **47:** 5-400]. – Departament de Biologia Vegetal (Unitat de Botànica), Universitat, Barcelona, 2001. 396 pages, 90 tables, 39 black-and-white and 12 colour illustrations; paper.

Several publications have recently dealt with the whole or part of the area to which this account relates and with aspects here treated. Concerning floristics, SORIANO's own list of the mapping grid square "Gréixer", of 1994 (see OPTIMA Newslett. 31: (15)-(16). 1997), is relevant, as that square is centred exactly on the Moixeró massif; also, the Flora of the Cadí-Moixeró Natural Park, published in 2002, covers the entire area (see item 42, above). As to vegetation, the area is situated at the meeting point of four maps of the 1 : 50,000 series for Catalonia (Nos. 216, 217, 254, 255; see the preceding review), published 1994 to 1999, for which SORIANO prepared the corresponding portion (except for No. 216, only very marginally concerned). Furthermore, an account that is very much parallel to the present one has been published in 1996 by VIGO for a territory immediately adjacent to the east, under the title *El poblament vegetal de la Vall de Ribes* (see OPTIMA Newslett. 32: (19). 1997).

The present account concerns a portion of the eastern Spanish pre-Pyrenees with a surface area of slightly less than 150 km^2, two thirds of which are protected within the Cadí-Moixeró Natural Park. For floristic purposes, just as in the list of the Gréixer square to which a supplement is presented on pp. 232-236 (but without specifying whether the additional records are from within the square or from the surroundings), SORIANO subdivides the territory by altitude (medium and high, i.e., below or above 1500-1600 m) and slope (southern, belonging to Berguedá, and northern, pertaining to Cerdanya).

However, the inventory of the flora is a mere side issue in this work. The focus is on a detailed characterisation of vegetation units, especially BRAUN-BLANQUETian syntaxa, of which several are newly described or renamed. The 80 phytosociological tables presented in Annex 4 are SORIANO's central, most important scientific contribution. W.G.

63. Luis VILLAR & José Luis Benito ALONSO – Memoria del mapa de vegetación actual del Parque Nacional de Ordesa y Monte Perdido. – Ministerio de Medio Ambiente, Secretaría General de Medio Ambiente, Organismo Autónomo Parques Nacionales, s.l., 2001 (ISBN 84-8014-301-0). 144 pages, tables, maps, graphs, drawings, 38 colour photographs; 3 separate, folded vegetation maps [by Luis VILLAR]; laminated boards.

The Ordesa National Park, founded 1918, is the oldest in the Pyrenees and the second oldest of Spain. In 1982 it was renamed and greatly expanded, from the initial 21 km^2 to 156 km^2 at present. One may add that a 200 km^2 peripheral zone (not mapped) has been placed under partial protection and that adjacent to the park, on the French side of the border, there is the Parc National des Pyrénées, declared in 1966, that includes the botanically famous Cirque de Gavarnie. The park area consists mainly of limestone and includes what is believed to be Europe's highest limestone peak, the Monte Perdido (3355 m).

The 48 mapped vegetation units are defined in terms of their physiognomy, and not all of them do coincide with higher-level syntaxa, but their syntaxonomic content or equivalence (in terms of the 51 recognised alliances and 75 associations) is mentioned. Among the park's varied flora are 64 taxa (species and subspecies) that are endemic to the Pyrenees, several of which (as well as some landscapes and widespread plants) are illustrated by good colour photographs. W.G.

64. Francesco Maria RAIMONDO, Giuseppe BAZAN, Lorenzo GIANGUZZI, Vincenzo ILARDI, Rosario SCHICCHI & Natale SURANO – Carta del paesaggio e della biodiversità vegetale della Provincia di Palermo. [*Quaderni di Botanica Ambientale e Applicata* (ISSN 1121-3572), **9.**] – Università degli Studi di Palermo, Dipartimento di Scienze Botaniche, Palermo, 2000. 160 + iv pages, 75 tables, 52 figures (partly in colour), 232 distribution maps, 30 colour photographs; 10 vegetation maps in separate cardboard folder; paper.

With its 5000 km^2, the Palermo Province is the largest in Sicily and occupies almost one fifth of the insular territory. According to the (unpublished) inventory held in Palermo, its vascular flora comprises 2148 different taxa (1814 species). The publication of the 1 : 50,000 map of its

actual vegetation, on 10 folded sheets, is a landmark achievement. The maps and accompanying text exist in two issues, one with the normal, uniform cream-coloured cover of the *Quaderni* of which they constitute a whole issue, the other with a special, colourful cover but identical content. Both were apparently published at the end of 2000, or shortly afterward.

Mapping is by 29 physiognomic vegetation units, described on pp. 63-81 of the text, each represented by its own unique tinge but unnumbered. There is no common legend but individual colour legends on each map. Reading the map is by colour only and requires considerable skill.

This is not the only aspect of the work that one would have wished to be more user-friendly. The worst is the lack of a table of contents for the text portion. This is not an explanation of the maps in the first place, but rather a supplement to them, with a wealth of additional relevant data and a number of very useful special maps: of geological substrate, species richness per map grid unit ("quadrant"), degree of anthropogenic plant cover degradation, and potential natural vegetation.

There is a detailed numerical analysis of endemism, by map sheets and "quadrants", but unfortunately the list of endemics has been compiled uncritically so that the value of these data is lesser than it might have been. There is no definition of what is meant by "endemic" (the intended explanation, most likely, is "endemic to the national territory of Italy"). Moreover, the list of the 232 "endemic" taxa (10.8 % of the total!) is heteroclite: many are of doubtful status or interpretation, and several are definitely not endemic by any reasonable standard, being either described from Sicily but widespread (such as *Colchicum bivonae, Helichrysum siculum* [an illegitimate misnomer for *H. barrelieri*] and *Ornithogalum collinum*) or even described from non-Italian type material: from Greece *(Bonannia graeca, Galanthus nivalis* var. *reginae-olgae),* Portugal *(Trifolium isthmocarpum),* or North Africa *(Serratula cichoracea* subsp. *mucronata).*

Following the general presentation and analysis of these data, they are again separately discussed for each of the 10 map sheets, which unavoidably leads to redundancy. One flagrant example of duplication of information is table 4, which tells exactly the same as the grid distribution maps of each of the 232 "endemics" do (but the latter are, naturally much easier to read and interpret). In a general way, illustration is one of the excellent features of the work – in particular, the colour photographs of plants, vegetation and landscapes. W.G.

65. Geôrgios N. HRONOPOULOS – Hlôrida, blastêsê, oikologikê axiologêsê kai prota-seis diaheirisês tou astikou kai proastikou periballontos tês Patras. – PhD thesis, Panepistêmio Patrôn, Tmêma Biologias, Tomeas Biologias Futôn, Patra, 2002. 320 pages, 65 tables, 18 figures; paper.

Urban botany is a new subject in Greece, not much belaboured in the Mediterranean area in general. The present PhD thesis is devoted to an inventory and analysis of the flora and vegetation of the urban and peri-urban areas of the harbour city of Patras, in the NW Peloponnesus, a territory in which 818 vascular plant taxa (species and subspecies) have been recorded, not taking into account those that are cultivated and do not escape.

For the purpose of analysis the city territory has been subdivided into four roughly concentric zones, from the city centre proper to the semi-agricultural peripheral areas. The taxa are categorised according to their status of occurrence: native, adventive (unintentionally introduced), apophytic (native but colonizing man-made habitats), ruderal, and subspontaneous; and their degree of "urbanophily", scoring 1 to 5 (or zero for rare plants with indeterminate score). The "urban flora" proper is defined to comprise the moderately to strongly "urbanophilous" (city-loving) plus the apophytic taxa. In addition to the flora the vegetation has been analysed and 31 syntaxa were identified, of which 22 count as synanthropic and 9 as "natural".

The major weakness of the study is the lack of clear, objective definitions for the categories it uses. The borderline between native and apophytic, between ruderal and adventive or subspontaneous is weak and often arbitrary. Many assessments are questionable. Naturalised plants introduced through cultivation (think of *Papaver somniferum, Opuntia, Agave, Oxalis pes-caprae*) have been considered as adventive. The ruderal category has been greatly inflated by the inclusion of taxa of the wild flora that are normally considered as apophytic. The attribution of "urbanophily" scores appears to have been largely intuitive, where one might have expected a quan-

titative, reproducible approach (e.g. relative number of localities in synanthropic syntaxa, or frequency distribution per urban zones). Some of the interpretations, e.g. the higher rate of "urbanophilous" taxa in the city centre, appear to be based on circular reasoning.

However, in fairness, such weaknesses are natural and to be expected in a pioneer work. They may constitute a challenge for others who follow the track, who will be glad to find an existing model to improve upon. Urban botany is still a novel, wide and promising field. W.G.

66. Niels BÖHLING, Werner GREUTER & Thomas RAUS – Zeigerwerte der Gefäßpflanzen der Südägäis (Griechenland). Indicator values of the vascular plants in the southern Aegean (Greece). [*Braun-Blanquetia* (ISSN 0393-5434), **32**.] – Dipartimento di Botanica ed Ecologia dell'Università, Camerino, & Station de Phytosociologie, Bailleul, 2002. 108 pages, 13 tables, portrait, 12 maps and graphs, 8 colour photographs; paper.

Niels BÖHLING, the principal author of this account, is not a newcomer to the Greek islands. When in 1994 he wrote his PhD thesis on the botany and landscape ecology of the island of Naxos in the Cyclades, he pioneered in the use of indicator values in the Aegean if not in the Mediterranean as a whole (see OPTIMA Newslett. 30: (39). 1996). He stuck to that specialty in the present work, by which he applied the concept of indicator values in a much larger area, increasing the number of vascular plant taxa scored from 931 (for Naxos) to the awesome total of 2442, being the total known floristic inventory of the southern sector of the Aegean archipelago.

The indicator values are ELLENBERG'S invention, and his precepts, modified but slightly, have been followed here. For each taxon, the preferences with respect to light, temperature, climate continentality, water supply, soil acidity, nutrient availability and salinity were assessed on a 9 or 10 unit scale (12 units for water supply). The result is a 7-digit numeral characterising each taxon, with the idea that the corresponding parameters of any given locality can then be assessed by averaging the indicator values of the plant taxa present. Other parameters, such as grazing pressure, might be added in the future.

Indicator values are so defined as to vary potentially, for widespread taxa, in the various parts of their area. This means that the values had to be assessed anew for all South Aegean taxa, even those for which they had already been established elsewhere. In order to achieve this, BÖHLING has spent almost one year on 12 different field trips, between 1997 and 2001, exploring the South Aegean island arc in all its parts. He has collected a large number of vouchers, of which the first set is being incorporated in the Berlin herbarium, has published various papers and notes, and discovered several new species. He may take justified pride in his achievements. W.G.

67. Jean LÉONARD – A contribution to the flora and vegetation of the deserts of Iran [vol. 8]; vol. 9, Phytogeographical considerations of the Irano-Turanian, Saharo-Sindian and Somali-Masaian phytochoria. Translated [from French into Persian] by M. GHORBANLI. [*Research Institute of Forests and Rangelands, Publication* No. **290; 316**.] – Islamic Republic of Iran, Research Institute of Forests and Rangelands, [Tehran], 2002; 2003 (ISBN 964-473-138-7; -172-7). [8] + 208; 130 pages, tables, maps; 2 paper fascicles.

Two of the 10 parts of Jean Léonard's comprehensive monograph of the flora and vegetation of the deserts of Iran have now been translated into Persian. They are those that deal with the chorology of the plant taxa and the phytogeography of the area. The original French version of the text, published in 1988 and 1989, has been reviewed previously in this column (in OPTIMA Newslett. 25-29: (41)-(42). 1991). W.G.

Applied Botany

68. João Domingues de ALMEIDA, Arménio C. MATOS & A. Cristina TAVARES – Catálogo de plantas aromáticas e medicinales, Jardim Botânico de Coimbra. – Universidade de Coimbra, Faculdade de Ciências e Tecnologia, Departamento de Botânica, Coimbra, [2003]. 53 pages; paper.

This tiny but lovingly written pamphlet is an inventory of the 259 vascular plant species grown in the "Medical School" of the Coimbra Botanic

Garden, which is a sector adjacent to the systematic sections of the "Classic Garden". The catalogue is arranged alphabetically by families and genera, and for each species it gives the location in one of the 30 flower beds (by bed and plot number), the accession number or locality of provenance, world distribution and, most importantly, the known or alleged medicinal properties and traditional uses of the plant. The latter information, taken from various sources, is often quite colourfully presented. Wisely, however, the authors decline responsibility for any fatal consequences for those who might follow the advice they give or quote. W.G.

69. Carmine GUARINO, F. NAPOLITANO & V. SPADARO – The officinal flora of Sannio (Benevento, SE-Italy). [*Bocconea* (ISSN 1120-4060), **15.**] – Herbarium Mediterraneum Panormitanum, Palermo, 2003 (ISBN 88-7915-016-2). 168 pages, 53 black-and-white figures; paper.

Samnium (Sannio), the homeland of the old Italic tribe of the Samnites, is not a clearly defined geographical area but a vague notion that went through shifting interpretations and held varying locations in the historical past. For the purposes of this study, it is obviously treated as co-extensive with the Benevento Province.

The city of Benevento lies to the north-east of Naples, and its province is the northernmost portion of the Campania region. A mountainous inland area, retrograde in industrial and tourist development but still holding an unspoilt, rich rural tradition; an area that has the reputation of being the epicentre of Italian witchcraft and sorcery. In other words: a most promising place for a study of ethnobotany and medicinal plant lore.

Following general chapters of introduction on the land, its culture and history, and preceding some loosely linked essays on ancient and medieval history, transhumance and sorcery, the core of the work is an enumeration of 379 plant species with their vernacular designations and uses for food, healing and various other purposes. The text is difficult to read, partly for linguistic reasons (you have a better chance of understanding what is meant if you are fluent in Italian) and partly because it is written in an unnecessarily complex style. The special terms used for medicinal properties are largely obsolete and would have deserved to be explained in an apposite glossary. Few current dictionaries include terms such as cholagogue, emmenagogue, and the like, and "edile consumption" (referring to the quality of a food plant) simply does not exist.

This is not the only unsatisfactory aspect of the work. The main criticism can be summarised by the words carelessness and inaccuracy. In a documentary study of this kind, which relies partly on literature survey and partly on ethnographic field studies, it is unacceptable that the share of either source is not carefully documented. One expects that the criteria used for selecting the species treated be specified. One may feel that dot distribution maps for individual species are dispensable – but if they are present they should be accurate and not a haphazard display of fantasy dots to show general areas of occurrence. And one would like to be able to trust that the plants mentioned and the properties described fit together.

Make a few tests. You will find that the map in Fig. 12 has *Asplenium ruta-muraria* in the caption but the reference to it is under *A. ceterach*. The homotypic synonyms *Dittrichia viscosa* and *Inula viscosa* are treated as two distinct species with different properties, but the index has *I. helenium* instead of *I. viscosa* (and the information given under the latter name likely belongs to the former species). And what to say of the data given under *"Carlina utzca"*, which is a misspelling for *C. utzka*, which in turn is a misnomer for *C. acanthifolia* – when the specimen photograph illustrating that species is in fact an immature individual of *C. acaulis* subsp. *caulescens?*

Bocconea is an honourable series published by a reputed institution; it deserves better contents than the present volume offers. W.G.

Conservation Topics

70. Jorge Alfredo REYES BETANCORT, María Catalina LEÓN ARENCIBIA, Wolfredo WILDPRET DE LA TORRE & María Mercedes MEDINA PÉREZ – Estado de conservación de la flora silvstre amenazada de Lanzarote (Islas Canarias). – Gobierno de Canarias, Consejería de Política Territorial y Medio Ambiente, Viceconsejería de Medio Ambiente, sine loco, 2000 (ISBN 84-89729-11-5). 177 pages, 1 graph + 19 maps in colour, 31 colour photographs; paper.

This is not yet another plant red data book, nor is it a full report on the status of plant conservation on the Island of Lanzarote, as one might infer from the title. It is, at the same time, more and less that either, and may well be an early specimen of a new generation of plant conservation books.

Following upon well illustrated introductory chapters on the physical environment, flora and vegetation of the island, written in the usual careful and well documented style that characterises the products of the botanical team of the University of La Laguna, the main body of the book deals with just 16 taxa (14 species, one subspecies, one variety), selected for the degree of threat they are facing. Exactly half of them are endemic to Lanzarote, the other eight extend to the neighbouring island of Fuerteventura, and one reaches the opposite coastland of Morocco. Conversely, exactly one half of the 14 species endemic to Lanzarote have been included, plus one of two endemic varieties.

The unusual aspects of the present treatment are the substantial original research that went into it and the amount of data provided for each taxon. Not only has a full literature survey been conducted (as documented by extended bibliographies), has the distribution been mapped (in grid maps with a mesh size of 2.5 × 2.5 km) and the herbaria screened (with specimen citation lists). More importantly, each known population has been studied in situ, the numbers of individuals have been estimated, the environment is described and the present threat and conservation status recorded. As a result, new threat categories are being proposed in each case, that are much more soundly based than is usually the case with such indications.

This work, therefore, marks a substantial progress with respect to traditional plant conservation studies of a comparable scope – and it whets the appetite for more: more studies of a similar kind, but also, even more parameters to be assessed in the future, such as genetic diversity and age structure of populations, reproductive biology, pests and predators. An ambitious and demanding goal, for sure, but one that, if attained, can substantially improve the odds of saving endangered species; and should all efforts nonetheless be vain, at least to have an adequate knowledge of what is being lost. W.G.

71. Francesco Maria RAIMONDO, Rosario SCHICCHI & Giuseppe BAZAN – Protezione delle specie endemiche minacciate. Rapporto finale della parte italiana. Protection of threatened endemic species. Final report of the Italian partner. [Pilot Action under Art. 10 FESR 1997/99, ARCHI-MED Central and Eastern Mediterranean Space, Project 2.1.]. – Palermo, 2001. 117 pages, 29 tables, 8 black-and-white photographs; paper.

ARCHI-MED was defined as a trans-national project in the field of spatial planning, concerning the Central and Eastern Mediterranean space and implemented in the framework of the European Regional Development Fund. It was funded as pilot action involving the participation of two member states of the European Union, Italy and Greece, with a 75 % contribution from the EU, and comprised 4 topics and 7 discrete projects. One of the latter, placed under the topic "Prudent management of natural heritage", was titled "Protection of threatened endemic species".

The whole pilot action ran through the years 1999-2001. The results of the project at hand were presented at a round table conference at the start of the X OPTIMA Meeting in Palermo, on 13 September 2001. The printed report, published at the end of 2001, concerns only the Italian half of the project. The report on the Greek half, co-ordinated by zoologist F. M. MYLONAS and devoted to the threatened species of Crete, has not so far come to my notice.

Among the ambitious goals of the project were the inventory of threatened species of flora and fauna, the assembling of conservation-relevant data concerning them, the organisation of these data in a newly designed database, and the provision of free access to these data through the Internet. At least as far as the latter point is concerned, this pertains to science fiction rather than science proper. Today (end of June 2004), when the project funding has long been terminated, the Website of "archi-med.net" still welcomes you with the promise "Coming soon!!".

The printed report is not, however, devoid of interest. It provides abundant if rather disorganised tabular material on the threatened species of the four Italian regions covered: Apulia, Basilicata, Calabria, and Sicily. The data from the zoological side are less complete than the botanical ones, being based entirely on literature sur-

vey. They also involve a puzzling contradiction, as in one place (p. 8) they are declared to concern the vertebrate fauna only, in another (p. 40), both the vertebrate and invertebrate one, but in actual fact all zoological data and lists are are of insect species only. The botanical data are derived from a wider range of sources, including herbaria, unpublished communications and some field work. They are more complete for Sicily and Basilicata than for Apulia and Calabria, for which no ethnobotanical data are presented. Also, risk assessment is obviously further advanced for Sicily than for the three other regions, as the number of threatened Sicilian taxa is highest in all risk categories except one: Deficient Data.

It is a real pity that this promising programme has had no follow-up opportunity. W.G.

72. Svetlana ALADŽEM (ed.) – Zelenoto zlato na Bălgarija. The green gold of Bulgaria. – Ministerstvo na okolnata sreda i vodite na Republika Bălgarija, Sofija, 2000 (ISBN 954-748-009-x [Bulgarian], 954-748-010-3 [English]). 116, 96 pages, coloured and monochrome illustrations; 2 paper booklets in cardboard box.

Bulgaria is a proud nation. Bulgarians take pride not only in their history and culture but in their country, its nature and natural riches. Lacking gold ore and wells of the black gold, petrol, they are fully aware of the value of the "green gold" in which Bulgaria abounds: nature in all its diversity. Bulgaria is, we are told in this delicious twin booklet, Europe's if not the World's best champion in nature conservation, having pioneered in legislation and effective protection of the environment since early days.

Two booklets, cheaply printed on recycled paper, one in Bulgarian illustrated with colour photographs, the other a remarkably idiomatic English translation, lacking the images and in monochrome print. Nothing much to the eye perhaps, but nonetheless quite fascinating reading. The text has been written primarily for the country's interior market but is instructive for the outsider as well. It combines facts and feelings to equal shares, the facts pertaining, e.g., to legislation, protected areas, numbers of taxa and endemism rates. It is by no means a surrogate for a red data book (such exist in excellent quality already, both for animals and plants), but primarily an incentive to treasure natural heritage and value Bulgaria's privilege in hosting a remarkably rich fauna and flora.

The overall tenor of the book is optimistic. The very first sentence reads: "Humankind is celebrating the third millennium." The sceptical minded may ask whether celebration is not premature, when it is uncertain that by the year 3000 there will be anyone left to rejoice – but then, it may well be that a text like this one, and many more of its kind, will be of essence for the survival of our own race. W.G.

73. Neriman ÖZHATAY, Andrew BYFİELD & Sema ATAY – Türkyie'nin önemli bitki alanları. – WWF Türkiye (Doğal Hayatı Koruma Vakfı), İstanbul, 2003 (ISBN 975-92433-0-x). 88 pages, tables, graphs, maps, 51 colour photographs, 2 folded maps as insets; 1 paper bound fascicle with CD-ROM.

A team of about 40 Turkish botanists from all over the country has set to work and defined their Important Plant Areas (önemli bitki alanları, or ÖBA), under the criteria specified by the Planta Europa Steering Committee. They came up with an impressive list of 122 such areas, for a total of 11 million hectares or 13 % of the country's land surface. Their results (alas in Turkish only for the time being, except for a two-pages English summary) are presented in this book and accompanying compact disk.

This is a well presented work, carefully edited and nicely produced, to which one wishes every possible success. The future tasks it defines are ambitious but crucial: intensified research work on the plants and their habitats, improved legislation, and the granting of legal protection to all areas, with suitable management plans. Of any European and Mediterranean country Turkey, with its 10,000 vascular plant species one third of which are endemic, is most worthy of such efforts!

The printed book is a synthesis, which characterises briefly each area, maps its location within Turkey's seven administrative regions, and summarises information on the physical environment, vegetation, flora, and impending threats. It is illustrated with excellent colour photographs of representative landscapes and plant species. The core factual information, however, is confined to the CD. It takes the form of an easy to use audio-visual presentation requiring no

prior installation, but is so memory-demanding that, for it to run properly, you better switch off the music (a lovely selection of Bach, Mozart, Vivaldi, and Chopin) and close down any competing applications. Having enjoyed a few gadgets such as gnats swarming around a flower and birds flying by, you can then concentrate on the essential information.

The seven appendices and annexes on the CD include such important items as a tabular list of the 3045 [!] rare and threatened taxa of the Turkish flora, with threat category and known occurrence in the ÖBAs; a list of Turkish species mentioned in the Annexes to the Berne Convention; an inventory of plant communities; a glossary of technical terms; a bibliography; and an index. Also, ample explanatory text, a site map and colour photographs can be looked up for each individual ÖBA. None of these data is to be found in the printed book.

Incidentally, threatened plant conservation is not the only task Turkish biologists are facing. As is evident from a table and the final map, they have also defined 97 Important Bird Areas and 17 sea turtle nesting sites. Looking up a map displayed on the Turkish WWF Website (http://www.wwf.org.tr/tr/main.asp), you can find three more of the latter and, in addition, 9 Important Forest Areas and 16 habitats of the Mediterranean monk seal. One can but be awed by such dedicated and many-sided nature conservation activities. W.G.

Gardens and Gardening

74. Nada PRAPROTNIK & Ciril MLINAR – Alpiner botanischer Garten "Juliana" in Trenta. – Prirodoslovni Muzej Slovenije, Ljubljana, 2000 (ISBN 961-90008-9-7). 126 pages, 2 maps, 99 photographs (mostly in colour); laminated boards.

The alpine botanical garden Juliana, founded in 1926, is the oldest of its kind in Slovenia. Its location is on the west side of Mt Triglav in the Julian Alps, close to the headwaters of the Soča (Isonzo) river in the Trenta valley. It is small (c. 2500 m^2) and low-lying (at 800 m a.s.l.) but well kept, and is remarkable for being devoted almost totally to the display of Slovenia's alpine flora.

Two earlier editions of a guide booklet to the Garden, by the same author, were published in 1976 and 1989, both written in Slovenian. Now, for the first time, a German version is available. It is pleasantly written and well illustrated, with about ¾ of the photographs representing local wildflowers. It is also of interest for the historically minded, as it includes data on the garden's history as well as early portraits (e.g. of the founder, the Trieste-born Swiss naturalist Albert BOIS DE CHESNE) and group photographs of former gardeners and local botanists. W.G.

75. José Manuel SÁNCHEZ DE LORENZO CÁCERES (ed.) – Flora ornamental española. Las plantas cultivadas en España peninsular e insular. Tomo II. *Cactaceae-Cucurbitaceae*. – Junta de Andalucía, Consejería de Agricultura y Pesca, Sevilla (ISBN 84-8474-046-3), Mundi-Prensa, Madrid, Barcelona & México (ISBN 84-8476-041-3) & Asociación Española de Parques y Jardines Públicos, Madrid, [2001]. 667 pages, numerous colour photographs; boards with dust jacket. Price: 32.69 €.

The second volume of this monumental work on the ornamental plants of Spain (of a planned total of six) has been published within a year from the first volume. Considering the high standard of both print and contents, this is quite an achievement – more so as the number of species treated (1235 in total, against 517 in volume 1) is much higher.

Even writing a simple list or inventory of plants cultivated in any one country is a difficult or near impossible task. Gardening fashions and availability through the trade vary by the day, and there is a steady flow of newcomers but also a tide of vanishing species to be borne in mind. Also, the breeders enliven the scene with their new creations, of which the pedigree is not always known with confidence and the names are subject to care. This work has wisely left out the cultivar level, confining itself to those species that are also found in the wild, plus the main horticultural hybrids or hybrid groups (such as the pansies, *Viola* ×*wittrockiana*).

The arrangement of the families follows that in HEYWOOD's "Flowering plants of the world" of 1978, which in turn is the same as STEBBINS's sequence of 1974: by and large, a slightly modified version of the CRONQUIST system. The treatment offered includes full keys (except for want of

a family key), some synonymy, etymology of the Latin name, Spanish (Catalan, Galician, Basque) designations when known, morphological description, and often notes on culture requirements, variability, etc. Illustration, by good colour photographs, is generous but does not aim at full coverage of all species.

At species level complete coverage has been attempted, except in the two largest families in which the boundless zeal of collectors made completeness impossible to attain: the cacti and "mesems". Even so, the treatment of these two families is impressively full, with 124 genera on 192 pages for the two combined. Large genera of other families include *Ficus* (21 numbered species), *Passiflora* (23), *Limonium* (26), *Camellia* (28), *Hypericum* (34), and *Begonia* (34). W.G.

76. César PÉREZ LÓPEZ – Guía de árboles, arbustos y plantas de flor, ed. 3. – Mundi-Prensa, Madrid, Barcelona & México, 2002 (ISBN 84-7114-936-2). 112 pages, graphs and 237 photographs in colour; laminated cover. Price: 15 €.

This illustrated guide to common cultivated woody plants and ornamentals is intended as a first rapid lookup for the complete newcomer. It presents 250 species (or species groups), each illustrated by a colour photograph but not otherwise described, just with a mention of some of their main properties relevant for the user. The categories covered are: shrubs, conifers, broad-leaved trees, flower-bed species, in-house pot plants, and trees for reforestation. Botanical accuracy is not to be expected, nor is it found.

Declared to be a third edition, the book curiously lacks reference to the two earlier ones. The Spanish National Library catalogue lists a book with the same title, authorship, format and page number, undated but published in 1998. Of this, the present book may well be a third printing rather than a genuine update. W.G.

77. Mary Anne KUNKEL – Leguminosas arbustivas y arbóreas para jardines mediterráneos. Catálogo ilustrado. Recopilado y comentado por Günther KUNKEL. – Ediciones Alternativas, Almería, 2002. 71 pages, 49 plates of drawings; paper.

This was intended as a birthday present for an outstanding botanical artist, Mary Anne KUNKEL, now in her 70s, by her loving husband, botanist Günther – a charming idea, is it not? The text is not in the limelight in this booklet, which lives through the 49 full-page plates of Mary Anne's drawings of legumes from Mediterranean gardens: 19 Caesalpinioids followed by 10 Faboids and 20 Mimosoids, alphabetically arranged.

The husband has written some preface matter and, for each species, a text equivalent to an extended caption: one line with common names in Spanish, English and German, exactly three lines of description, a last line with references to earlier published, fuller descriptive matter and data associated with the same drawings. Because these have, all but two of them, been published before in other works by KUNKEL, but often in a smaller size that does not do full justice to their artistic quality and scientific accuracy. W.G.

Bibliography and Biography

78. Eckhard WILLING – Bibliographie über die Orchideen Europas und der Mittelmeerländer. 2. Supplement. [*Journal europäischer Orchideen*, vol. **36**, Heft **1**, pages 3-400.] – Arbeitskreis Heimische Orchideen Baden-Württemberg, Stuttgart, 2004. 398 pages, laminated cover.

WILLING's basic Euro-Mediterranean orchid bibliography and its first supplement were published in 1977 and 1985, respectively, as vol. 11 of Willdenowia Beihefte and vol. 5 of Englera. the second supplement, therefore, roughly covers two decades, 1984 to 2003. It bears witness, on the one hand, of WILLING's dedication, care and thorough familiarity with the subject (he uses to check all listed items in original or photostat and possesses an all but complete set in his personal library); on the other hand, it demonstrates if need be that the exuberant activity of European orchidologists, amateurs and professionals alike, continues unabated.

In the introduction to the first supplement WILLING had made the point: Since LINNAEUS's 1744 paper that marks the beginning of orchid literature, and by early 1984, 6305 papers and books in total had been published on the subject, at an aver increasing rate: 10 per year before 1900,

38 p.a. during the first half of the 20th century, 55 p.a. in the 1950s, 86 p.a. in the 1960s, 144 p.a. in the 1970s, with a maximum of 214 in the early 1980s. Now the second supplement (1984-2003) adds 4886 new items, an increase of 40 %, corresponding to an average annual output of 244. Make your count: this is a logarithmic increase, unbroken since 1950, and if it continues there will be about 700 publications on Euro-Mediterranean orchids in 2050, and over 1300 in 2100. But perhaps, by then, the fashion has run low or, less desirably, the orchids have died out?

Therefore it is time for this bibliography to switch from paper to online presentation. If my prediction is correct – and granting WILLING long life – the next supplement (or, better, an integrated new edition) will appear in electronic format rather than in print. Even with the present, excellent but paper-based bibliography at hand it is becoming increasingly difficult to find one's way through the jungle of European and Mediterranean orchid literature. W.G.

79. Wolfredo WILDPRET DE LA TORRE – Un botánico en la Academia Canaria de la Lengua. – Academia Canaria de la Lengua, s.l., 2003 (ISBN 84-96059-14-6). 39 pages; paper.

Congratulations to Wolf WILDPRET for having been made a member of the Langauge Academy of the Canary Islands: A rare honour to be bestowed upon to a biologist, for sure! – and an excellent opportunity for Wolf to deliver a speech on the early set-up and development of the Botany Department of his University in La Laguna, which he directed since 1967 when it was created. He also, even more appropriately in the given context, explained how linguistics and botany interact in the study of vernacular plant designations and their origin, and in the definition and naming of vegetation formations by relying upon the experience of local people. And since it is a real academy to which he was admitted, all this has been properly printed in the traditional way, for distribution as a shapely brochure. Once again: Congratulations! W.G.

History and Arts

80. THÉOPHRASTE – Recherches sur les plantes. Tome IV, livres VII et VIII. Texte établi et traduit par Suzanne AMIGUES. [*Collection des Université de France, Série Grecque* (ISSN 0184-7155), **132**.] – Les Belles Lettres, Paris, 2003 (ISBN 2-251-00515-3). Pages [III]-XII, [1], [2]-72, [2]-72, [73]-[237]; paper. Price: 39 €.

This is the fourth of a series of modern, scholarly translations of THEOPHRASTOS's books *known as Peri futôn istorias, or History of plants*, written in the 4th century B.C., which are the generally acknowledged historical starting point of botany as a science. Depending on how the *History of plants* is defined, a question that is not yet fully resolved, this may be the final translation volume, or one more may follow. The translator and interpreter, Suzanne AMIGUES (a classical scholar with a remarkable botanical background), has delved into the problems surrounding the *History of plants* in a separate paper of hers (see next item, below). Her conclusions are as follows.

The generally accepted number of books of the *History* is 9, but there are deviating counts with 8 or 10 volumes as well. Some have considered the 9th volume, dealing with the saps and medicinal powers of plants, to be apocryphal; but this is not so. They represent a separate book (or perhaps a couple of books) authored by THEOPHRASTOS, but were not originally a part of the *History of plants*, to which they were added not long after his death.

To conclude: the translation of *History of plants* is now essentially complete. It covers what the "father of botany" knew of the diversity of plants, their organs, structures and life histories, following an artificial scheme of classification that distinguished between four categories: trees, shrubs, dwarf shrubs or suffrutices, and herbaceous plants. Books 7 and 8, here translated, deal with the last named: the former with the vegetables and wild species, the latter with legumes, cereals and summer crops.

The translation proper occupies 71 twin pages: the right-hand page of each facing pair bears the accepted version of the Greek original, with text variants listed as footnotes; the French text figures on the left-hand page, and is explained and commented in numerous substantial end notes on the pages 77-236. In other words, more than one half of the book consists of commentary, with a feeble quarter each for original text and French translation.

THEOPHRASTOS's writings are not just dead literature, they are remarkably alive and modern in many respects. Read them and you will be rewarded by an unusual sight: the plant world of Greece, wild and cultivated, seen through the eyes of an incredibly perceptive and thoughtful man with a completely unbiased and therefore original mind. A reading that, I trust, will be worth your time and effort! W.G.

81. Suzanne AMIGUES – Etudes de botanique antique. [*Mémoires de l'Académie des Inscriptions et Belles-Lettres*, **25**.] – Institut de France, Paris, 2002 (ISBN 2-87754-130-4). XV + 495 pages, 126 figures (mostly colour photographs); paper.

The leading specialist of botany and plant lore of the Ancient, Suzanne AMIGUES, presents us with a weighty volume in which her so-called minor writings are assembled. Minor, while primarily an expression of the author's great modesty, is also meant to contrast with her *opus magnum*, the interpretation and French translation of THEOPHRASTOS's *History of plants* (see the foregoing review). Yet, having looked at these essays you will hardly feel that any of them qualifies as "minor" in the usual sense.

There are 33 papers reissued here, originally published over a span of a quarter century (since 1978, to be exact) in 10 different books and a dozen of journals, few of which are likely to be present in a botanical library. Having them assembled in one place, in unified print, consistent editorial style, and embellished with new colour photographs, is a treat for anyone interested in the botanical aspects of classical writings. By publishing Ms AMIGUES' work, the French Académie des Inscriptions et Belles-Lettres (of which, surprisingly, she is not yet a member), has done a favour to botanists and classical scholars alike, for which we must all be grateful.

Rather than being arranged chronologically, the papers have been grouped thematically under three main headings, with several subheadings: THEOPHRASTOS and the origin of botanical science; the plant world of antiquity in its relation to modern sciences (history, archaeology, food technology, pharmacology, zoology, botany and phytogeography), and plants in Greek linguistics, literature and mythology. The subjects are much too varied to be mentioned in detail here, ranging from the writings of THEOPHRASTOS through the famous mythical *moly* and *silphium*, heliotrope and hyacinth to concrete botanical species such as Datura stramonium, Rhododendrum luteum and countless others. Ever and again you will wonder at the botanical skills of the author, admire her perspicacity in establishing links and interpreting data, and be charmed by her unpretentious straightforwardness.

Take your time to read this book. It is my guess that you will enjoy learning of the common Greek name for the morel and the box, *pyxos*, and its probable relation with *pyknos*, compact; or of the fate of *strobilos* (originally a spinning top) when it displaced *konos* as a designation for cones and conifers; and of many other equally thrilling if apparently trivial details. Time you will need, because the author's guild is not of hurried people, used as they are to measure time in centuries and millennia rather than minutes and seconds. By consequence, they will not even dream of summarising what they have to say in the form of an abstract. W.G.

82. Elmout MPAOUMAN [Hellmut BAUMANN] – Futa se arhaia ellênika nomismata. [*Prothêkê Mnêmês*, **2**.] – Êlibaton, Zôgrafou, 2004 (ISBN 960-8085-02-0). 79 pages, black-and-white illustrations, map; cloth with dust jacket.

Four years after having been published in German (see OPTIMA Newslett. 35: (29)-(30). 2000), Hellmut BAUMANN's book on plant effigies on Greek coins has become available as a Greek edition. The author, a retired Swiss businessman with four generations of Greek family tradition, undertook the translation himself.

What I had written in praise of the original German book remains true for the present one – contrary to the criticized points, most of which have been taken care of. In fact, this is not a mere translation but at the same time a new, improved edition, with many details mended and whole passages (such as the one on the Cretan date palm) re-written. An addition of note is the two-page introductory eulogy by OPTIMA Gold Medal bearer Dimitrios PHITOS.

For the record: One of the coins illustrated in this book was chosen as the emblem of the VI International Congress of Systematic and Evolutionary Biology, held in 2002 in the city of Patras (see item No. 99): a Didrachmon from Epirus,

230-220 B.C. It shows a fighting bull and oak wreath, standing for zoology and botany in a Greek context. W.G.

83. Pierre-Joseph REDOUTÉ – The Lilies. Lilien. Les Liliacées. – Taschen, Köln etc., 2000 (ISBN 3-8228-6407-2). 494 pages, frontispiece, portrait, 8 colour photographs, 444 pages of reproductions, at various scales, of 486 colour plates; hard cover with dust jacket. Price: 36 €.

The series of books on so-called lilies "is REDOUTÉ's largest and most ambitious work and is generally regarded as his masterpiece". This you can read in SOTHEBY's 1987 sales catalogue of the famous DE BELDER collection, in which the estimated value of a vintage copy of this botanical treasury was £60,000-70,000, whereas the actual hammer price reached the astronomic level of £154,000. Now you can have it all (not quite all, really) for €36: a good bargain if ever there was one.

The complete work was produced in 280 copies in-folio, plus 18 copies of a broadsheet luxury edition, between 1802 and 1816. It comprises 8 volumes with 486 plates, all colour-printed in a technique (stipple engraving) newly invented by REDOUTÉ himself, then finished by hand. The plants portrayed are a diverse lot, comprising colourful representatives of almost all fair-flowered monocot families except aroids, but with an emphasis on *Liliaceae* proper, *Iridaceae,* and *Amaryllidaceae*. I have counted no less than 34 modern families referred to in the index, including some *Orchidaceae, Bromeliacae, Musaceae, Commelinaceae, Zingiberaceae, Marantaceae* and *Alismatacae,* which cannot by any standards be associated with the "lilies". All these plants, originating from all over the world, were flowering in French gardens of the period and with few exceptions (such as *Veltheimia abyssinica,* table 186), were painted by REDOUTÉ from nature.

The accompanying text (which in the case of species described as new to science provides the original, validating description) is usually attributed to Augustin-Pyramus DE CANDOLLE for the first four volumes, François DELAROCHE then Alire Raffeneau DELILE for the later ones. However, There is no trace of the names of these botanists anywhere in the work; quite on the contrary, in the preface to the first volume REDOUTÉ clearly reclaims authorship for himself. He probably considered that he had bought it from the botanists he had hired to write the texts, and for nomenclatural purposes, this is indeed exactly what happened.

Regrettably, the original text has not been included in the present edition, nor with any of the earlier reprints of the plates that are known to me (you can find it in the IDC microfiche edition, though). There is a Japanese reprint of 1988, in two volumes, with the plates only; an English reprint, in 1981, of 108 selected plates with new accompanying text by Brian Matthew; and reproductions of REDOUTÉ's 468 extant original paintings, in a Sotheby sales catalogue of 1985. In all cases, the originals have been reproduced at smaller scales. The same is true of the present edition, where 226 of the plates have been reduced to about half and the remaining 260 to one quarter of the original size, i.e., to 27.7 × 17.4 cm and 13.9 × 9.2 cm, respectively. However, in 79 cases part views are added that are enlarged to full page-size, twofold as compared to the originals, giving a good idea of the quality and technique of REDOUTÉ's printing.

The volume has trilingual (English, German, French) introductory texts by Petra-Andrea HINZ on REDOUTÉ and Werner DRESSENDÖRFER on the work itself. The MÜLLER-DOBLIES's are credited with "compiling and researching" the plates, whatever this may mean (especially as there is a botanical editor in addition). For sure, the presently accepted name and family affiliation has been established in each case, but in the process, the nomenclatural importance of the publication has been all but lost. The index mentions the 17 names of new species and 4 new combinations published in the work that are still in use; but those names that serve as basionym for a now accepted name (e.g., *Sparaxis grandiflora* (Redouté) Ker Gawl., *Brunsvigia josephinae* (Redouté) Ker Gawl.) are not singled out, nor the accepted combinations when applied to the wrong plant (e.g., *Veltheimia capensis* (L.) Redouté), nor any synonyms. The importance of the work for plant nomenclature is revealed by a search of the *Index kewensis,* according to which source 120 binomials and 2 generic names *(Peronia* and *Ophiostachys)* were first published in it. Clearly, there is scope for further studies in this respect.

A last word on the colour photographs, by Kurt HENSELER. They are gorgeous close-ups of South African species in bloom, but appear to be

somewhat out of context, as only one of them is among those illustrated by REDOUTÉ. W.G.

84. Gianfranco DE MICHEL & Francesco DE SANTIS – Palma palmae. – Pendragon, Palermo, 2001 (ISBN 88-8342-105-1). XII + 206 pages, 2 frontispieces, 115 figures (mostly in colour); paper. Price: 19 €.

The Palermo Botanic Garden, one of the key places through which exotic palm species have found their way into Mediterranean gardens and parks, lately hosted two exhibits devoted to that plant family. In 1995 the title chosen was "Palms between art and science", more recently, "Palms of the authors". In both cases a synthesis or perhaps better symbiosis between botany and figurative arts was attempted, and it was achieved to such a degree that now the idea of a palm museum, to be built within the Garden as a complement of sorts to its live palm collections, is taking shape.

The present book, by two art and palm lovers but decidedly non-botanists, enlivens the scene of palm literature by a contribution of undeniable charm and originality. There is no way to characterise it in brief while doing it full justice, certainly not, as I here must do, by mentioning the titles of its four main parts: palms in botany, palms in religion, palms in mathematics, and palms in the arts. None of these chapters is what you would expect it to be, certainly not the first, botanical one, which combines philosophy, palaeontology, idealistic morphology with some biological notions in a giddying carrousel. Mathematical modelling and computer simulation of natural forms – not of palms alone, but perhaps more convincingly of cones, sunflower heads and nautilus shells, is the third theme. While the fourth, the most appealing to me, illustrates the role of palms and palm fronds in prehistoric frescoes, Rafael's paintings and popular art from all over the world.

The book is generously illustrated, and by its illustrations it takes life. Yet, the texts will also fascinate readers with advanced skills in the Italian language. As an of annex, the authors provide a translation into Italian of an old Tamil poem on the countless uses of the *Borassus* palm. W.G.

85. Kit TAN with **Julie KYHL – Biodiversity in some *Brassicaceae* or taxonomy can be fun.** – Narayana Press, Gylling, 2003 (ISBN 87-982179-7-6). 41 pages, 1 figure, 5 colour photographs, 15 plates of artwork in colour; hard cover.

Kit TAN can be funny. Here she comes up with something new and unheard of: a fairy tale of her invention in which, in stead of normal names of persons, places and things, she uses the long list of Latin generic names of Greek crucifers. Not always is the intended pun as obvious as in the case of *Diplotaxis* standing for an oversize cab and *Moricandia* for a brothel, but the children's book illustrations Kit has prepared in cooperation with Julie KYHL are, all of them, lovely, including the final one of a tragic car crash.

The book is dedicated to the memory of Peter DAVIS and to the skilled Danish botanical artist, Bent JOHNSEN. Alas, by now it is also JOHNSEN's memory being thus honoured, as he passed away in May 2004. They both, the inference is, have that peculiar kind of northerly humour you need to fully appreciate and enjoy this tale.

Indeed: Kit TAN *is* funny. Yet sometimes you cannot help suspecting that she just wants to make fun of you. W.G.

Herbaria and Libraries

86. Marcello TARDELLI, Laura SETTESOLDI & Mauro RAFFAELLI – The types of the Tropical Herbarium of Florence. Volume 1: Monocotyledons. – Erbario Tropicale di Firenze [Pubblicazione No. **92**], Firenze, 2001. 71 pages; paper.

There have been several publications on the herbarium collections at Florence in recent years, the last of which has been reviewed in the foregoing issue of this column (OPTIMA Newslett. 36: (44)-(45). 2002). It dealt with the users of the herbaria (including the Tropical Herbarium, FT), whereas earlier contributions were centred on the collectors represented. Now, for the first time, the type materials held are being presented.

The FT Herbarium is kept under the same roof as the other Florentine herbaria (FI), but in contrast to these it is not, technically, a part of the University's Natural History Museum. It holds 180,000 specimens, mostly from East Tropical Africa, and has recently been rearranged

and revised. The type inventory, of which the first part (on monocots) is here presented, is one of the results of this revision. Further instalments are to cover the dicots.

Original material of 463 different names of species and infraspecific taxa has been identified in FT, of which 95 % were described from the former Italian possessions in Ethiopia, Eritrea, and Somalia. The actual number of specimens is much higher, as in many cases several syntypes are involved. It is to be hoped that in the foreseeable future these important data will be made available for online consultation, together with digital images of the specimens. A project with exactly that aim, concerning African type material in several important herbaria, is presently being funded by the Mellon Foundation. W.G.

Nomenclature

87. Christopher D. BRICKELL, Bernard R. BAUM, Wilbert L. A. HETTERSCHEID, Alan C. LESLIE, John MCNEILL, Piers TREHANE, Freek VRUGTMAN, John H. WIERSEMA (ed.) – International code of nomenclature of cultivated plants (I.C.N.C.P. or Cultivated Plant Code) incorporating the rules and recommendations for naming plants in cultivation. **Seventh edition.** Adopted by the International Union of Biological Sciences Commission for the Nomenclature of Cultivated Plants. [*Regnum Vegetabile* (ISSN 0800-0694), vol. **144,** and Acta Horticulturae (ISSN 057-7572), vol. **647.**] – International Association for Plant Taxonomy, Wien, & International Society for Horticultural Science, Leuven, 2004 (ISBN 90-6605-527-8). XIX + 123 pages; laminated cover. Price: 55 €.

The previous edition of the "Cultivated plant code" (ICNCP) had been published in 1995 and introduced profound changes with respect to its forerunners. This time the changes are less profound but still substantial. The main effort was toward consolidation, greater clarity and simplicity of language, and a more logical structure: laudable goals which, as far as a cursory reading permits to tell, have by and large been attained.

Basically, cultivated plant nomenclature is complementary to the scientific naming of plants governed by the International Code of Botanical Nomenclature (ICBN) and governs designations for groups of cultivated plants, of which two kinds are recognised: the cultivar and the Group ("grex" in orchids). Cultivar and Group epithets are affixed to botanical genus or species names (or their modern-language equivalents). They can be in any language and script. They are increasingly linked to "standards", which are the equivalent of our types. Subject to stated requirements, they can be established by anybody and, once established, are available for free use by everybody.

This sounds fairly simple – but in reality, cultivated plant nomenclature is a complicated business, much more complex, in many a way, than botanical nomenclature. It is situated in the midst of interacting, often conflicting spheres of influence: trademarks, registration authorities, statutory bodies abiding by national legislations. While ultimately governed by the International Union of Biological Sciences (IUBS), the ICNCP has neither the tradition nor the standing that would enable it to impose its own rules in a general way.

I wish the ICNCP and its sponsor, the International Society for Horticultural Science, good luck in their strive toward a coherent and globally accepted system of naming cultivated plant taxa (or "culta", as some prefer). They have, once again, done an excellent job! W.G.

88. Werner GREUTER, John MCNEILL, Fred R. BARRIE, Hervé Maurice BURDET, Vincent DEMOULIN, Tarciso S. FILGUEIRAS, Dan H. NICOLSON, Paul C. SILVA, Judith SKOG, Piers TREHANE, Nick J. TURLAND & David L. HAWKSWORTH (ed.) – Código internacional de nomenclatura botánica (Código de Saint Louis) adoptado por el decimosexto Congreso Internacional de Botánica, Saint Louis, Missouri, Julio-Agosto 1999. **Edición en Español** a cargo de Roberto KIESLING. – Instituto Botánico Darwinion & Missouri Botanical Garden Press, Buenos Aires & Sait Louis, 2002 (ISBN 987-20419-0-3). XXV + 181 pages, paper.

89. Jesús IZCO & Marcelino del ARCO [transl.] **– Código internacional de nomenclatura fitosociológica.** [*Materiales didácticos universitarios, serie botánica,* **2.**] – Servicio de Publicaciones, Universidad de La Laguna, 2003 (ISBN 84-7756-548-1). 155 pages; paper.

The publication of Spanish translations of two sets of nomenclatural rules, just one year apart, is a welcome token of the vitality of botanical sciences in the Spanish-speaking world. On either side of the Atlantic, in the motherland of Spain and Latin America, taxonomic botany and vegetation sciences are stronger today than they ever were.

The International Code of Botanical Nomenclature has seen a single official Spanish edition, in 1956, when thanks to a translation contributed by three Cuban botanists, PONCE DE LEÓN, ÁLVAREZ, and LIOGIER, the "Paris Code" appeared with a quadrilingual text. Discounting a translation, published in Argentine in 1948, of the (unofficial) "Brittonia Rules", there was just one more Spanish edition of the botanical Code to date, by Jesús IZCO in 1976, based on the "Seattle Code" of 1972 (OPTIMA Newslett. 3: 31-32. 1976). This was somewhat out of date already when published, as meanwhile the Leningrad Congress of 1975 had modified the Seattle rules, and is by now completely obsolete. The present translation of the "Saint Louis Code", therefore, fills an obvious gap. An Argentinian botanist, Roberto KIESLING, has undertaken the task in consultation with colleagues in various countries, and I could verify that he did an excellent job. Based on his careful analysis, we may hope that uniformity in the so far ambiguous accentuation of Spanish technical terms such as taxón (plural taxones) rather than taxon (pl. táxones), holotipo rather than holótipo, etc. will eventually be achieved.

The nomenclatural code of phytosociologists is a more special work, for use by a particular school of vegetation scientists, albeit the most powerful one. The first edition of their Code was published in 1976, the second ten years later, and the third and current one in 2000. Jesús IZCO (also the translator of the "Seattle Code" – see above) and Marcelino DEL ARCO took care of both the second and third edition. They were not content with just translating, however, but added each time an element of their own. For the second edition they compiled a new subject index, which the English third edition promptly took on board. This time they have contributed an appendix of case studies on the application of the rules, the formation and interpretation of phytosociological names: a commendable didactic effort, which will help beginners by making the dry legalistic provisions of the main text more palatable and more easily understood. W.G.

Festschrifts

90. Dušan MERHAR (ed.) – Ob 80-letnici akademika Ernesta Mayerja. [*Slovenska Akademija Znanosti in Umetnosti, Razred za Naravoslovne Vede, Razprave* (ISSN 0352-5090), **42-2.**] – Slovenska Akademija Znanosti in Umetnosti, Ljubljana, 2001. 319 pages + insert of [4] pages, tables, graphs, drawings, maps and photographs partly in colour; paper.

Ernest MAYER celebrated his 80th birthday on 10 November 2000. He is an outstanding personality in Balkan botany, whose vast knowledge of the flora is equalled by his personal kindness and generosity. Even though our personal contacts have lessened in recent years, due perhaps to a more retired style of life that ill health forced upon him, I still consider him among my dearest botanical friends. Many a congenial evening spent together at his home in Ljubljana or elsewhere in his Slovenian homeland will remain unforgotten. Ernest was a faithful companion in OPTIMA's set-up and early history, having been a member of the founding executive council, then vice-president (1977-1983) and Board member until 1995. It was one of his sorrows that the organisation of an OPTIMA Meeting in Yugoslavia, which he had long promoted, had to be called off twice due to unfortunate political events. We do hope that now, when Belgrade at long last is about to host the XI Meeting of or Organisation, he will be with us to enjoy it.

MAYER's main contributions are to the knowledge of the flora of the Yugoslav countries, of which he himself discovered and described 10 species and nothospecies plus many lower-ranked taxa, and in the history of their botanical exploration by pioneers such as SCOPOLI, VISIANI, and PANČIĆ. By one of his early publications, the critical inventory of the flora of Slovenia (1952), he laid the bases on which he and others working on that flora have since built. To date, that book remains his main scientific achievement.

This shapely jubilee volume, to which many of his friends and pupils have contributed, is a well deserved homage to Ernest MAYER's botanical achievements. Following after an initial, bilingual (Slovenian and English) biographical essay, with comprehensive bibliography, by Tone WRABER and Mitja ZUPANČIČ, 17 papers (6 in English, 2 in German, the others with English summary) deal

with floristic, geobotanical, palynological and historical subjects, a substantial proportion being devoted to the study of individual taxa: *Paradisea, Nepeta, Fagopyrum, Dianthus, Taxus, Pedicularis, Campanula, Astragalus,* and *Typha*. Two newly described species and one variety are named, in MAYER's honour, as *Pedicularis ernesti-mayeri*, *Dianthus ernesti-mayeri*, and *Astragalus onobrychis* var. *ernesti-mayeri*. W.G.

91. Ana PETROVA (ed.) – [Dedicated] **to Prof. Emanuil Palamarev, DSc, on the 70th anniversary of his birth and 45 years scientific research.** [*Phytologia Balcanica* (ISSN 1310-7771), **9(2).**] – Institute of Botany, Bulgarian Academy of Sciences, Sofija, "2003" [2004]. Pages [1-4], 135-317, 6 folded insets, 6 colour photographs, black-and-white illustrations, tables; paper.

In honour of Emanuil PALAMAREV, renowned palaeobotanist and director of the Botanical Institute of the Bulgarian Academy of Sciences in Sofia, his friends and colleagues have written 14 papers (13 in English, one in German) on various palaeobotanical subjects, to be assembled in a jubilee volume. In stead of an introduction, Ana PETROVA has contributed a biographical sketch, with a full list of his publications and other scientific achievements.

Unfortunately, Ana's text must now serve as an obituary. Delay in publication has meant that PALAMAREV, whose untimely death on 28 January 2004 is recorded on one of the initial pages, was deprived of the plesure and satisfaction to see his festschrift printed. It now stands as a monument to his memory. W.G.

Reprints

92. Hermann E. RICHTER – Codex botanicus linnaeanus. Volume I. With a biographical sketch by H. Walter LACK and a translation of the introductory text by Sten HEDBERG. **Volume II. Index alphabeticus** to the Linnean botanical codex, all of its genera, species and synonyms, totally complete, by Wilhelm Ludwig PETERMANN. [*Regnum Vegetabile* (ISSN 0080-0694), **140**.] – [Introductory matter + facsimile reprint]: Gantner, Ruggell, 2003 (ISBN 3-906166-04-X, vol. 1; 3-906166-05-8, vol. 2; 3-906166-03-1, set). pages [1]-53 + [III]-XXXII + 1-1102 + [1]-5 + [I]-IV + 1-202, portrait; cloth with dust-jacket, 2 volumes in cardboard box. Price: 360 €.

RICHTER's Codex is an invaluable aid for anyone who has to do with the nomenclature and taxonomy of Linnaean plants: a scholarly and critically compiled, condensed version of all of the great master's important works. Each entry starts from the place of valid publication of the name, then goes forward to the last of LINNAEUS's writings (usually ed. 13 of the *Systema*) and backward to the main pre-starting-point texts such as the *Hortus cliffortianus*. It gives the accepted names and diagnostic phrases, descriptive matter and synonymies, statements of provenance, with all their respective variants and changes. In other words, looking at one entry in RICHTER (and having got accustomed to its terse, space-economic presentation style) is just as having a dozen Linnaean books open simultaneously before your eyes. Furthermore, thanks to PETERMANN's diligent indexing of the *Codex*, you can access this information, starting not only from any name LINNAEUS himself had used, but also from any of the pre-Linnaean and early Linnaean phrase names that he cited under his own taxa.

RICHTER's *Codex* was much used in the second half of the 18th century, serving as basic reference work for such well known books as WILLKOMM & LANGE's *Prodromus florae hispanicae*. In more recent times, however, only a few insiders and nomenclatural cracks have been aware of its usefulness. It has always been a rather rare book which, especially outside of Germany, was present only in a few major libraries; but although Kew, of course, has a copy, the compilers of *Index kewensis* are among those who chose to ignore it, much to the detriment of the quality of the *Index*: several errors and omissions in it could have been avoided by consulting RICHTER.

For many years have I encouraged KOELTZ to publish a reprint of this work. I am thus delighted that, with help by the International Association for Plant Taxonomy, he finally managed to do so. My only regret is that, being produced as a half-tone facsimile, the book is not as easy to read as one would have wished: the bleary print, most or which is diminutive anyway, is a torture for the eye. W.G.

93. Francesco CUPANI – Panphyton siculum [sive historia naturalis de animalibus, stirpibus, fossilibus quae in Sicilia, vel in circuitu ejus inveniuntur]. Edizione a cura di Carlo PASTENA, Angela ANSELMO & Carmela ZIMMARDI. – [Introductory matter + facsimile plates]: Biblioteca Centrale della Regione Siciliana, Palermo, 2003. 89 + [1] + [3] + [3] pages, 665 foll. with facsimiles of title pages (6), frontispiece portrait (1) and copper plates (658); 3 hard-cover volumes.

These volumes are not really a reprint because the work they reproduce was never published. In PRITZEL's Thesaurus it is mentioned as a "liber ineditus rarissimus". Such mystery and controversy surrounds it that I may be forgiven for going into the matter in more detail than usual.

Francesco CUPANI (1657-1710), a Franciscan monk and outstanding naturalist, became supervisor of the botanical garden founded in 1690 in Misilmeri near Palermo by Don Giuseppe DEL BOSCO, Prince of Cattolica,. CUPANI published a book on the garden's holdings in 1696, with a supplement in 1697, and there he announced the monumental work on the Sicilian flora and natural history that he was busy preparing, and for which over 600 copper plates with the figures of 800 plants had already been engraved. Nothing had been published, however, when he died in 1710. He left behind the copper plates and presumably a substantial manuscript. He also left an herbarium, long lost sight of but of which in the 1990s, surprisingly, 3 bound volumes have been rediscovered, one in Catania and two in Palermo (MAZZOLA & RAIMONDO in Giorn. Bot. Ital. 129(2): 159. 1995).

Obviously CUPANI had proof sheets printed from the copper plates, in varying numbers, and from assortments of these Antonio EPIRO, a publisher in Palermo, produced various sets of bound volumes, with his own printed title page dated 1713 and with CUPANI'S portrait at the front. As the plates bear no numbering and no plan of the work was available, the six known copies of that "edition" are all differently arranged and also differ widely in size and contents. Five are in public libraries: two in the Central Library of the Region of Sicily in Palermo (one in 3 volumes, with 615 different and 39 duplicated plates; the other in one volume of 252 plates without duplication), one in the Municipal Library of Palermo (2 volumes with 477 different and 35 duplicated plates), one in Catania (2 volumes with 658 plates, one duplicated), and one at the Linnean Society of London (1 volume with 199 plates); one is still family property (2 volumes with 414 plates). The 1713 "edition" can be recognised (a) by the presence of a title page and (b), more reliably, by the fact that the plates bear no engraved number and are printed pair-wise, on one side only, on double sheets. It is probable that some of the fragmentary runs mentioned in the literature, including a few that CUPANI may have sent to fellow botanists during his lifetime, belong to the original proof sets. Others are likely part of the BONANNO re-issue (see below).

At CUPANI's death his manuscripts and copper engravings were entrusted to Antonino BONANNO, who intended to edit the text into a work in which his own contributions were integrated, and data from Silvio BOCCONE and other early Sicilian botanists added. BONANNO's manuscript, in 16 volumes, survives in the Municipal Library of Palermo but has not so far been critically studied. Later botanists, starting with Antonino BIVONA BERNARDI in 1806, accused BONANNO of plagiarism, as may or may not have been his intent. The fact is that he died in 1719, and that his work, too, remained unpublished. During his lifetime, he had the original copper plates, or at least part of them, retouched, adding plate numbers, expanding the shading (by no means an improvement, to my taste!), and correcting or newly supplying some of the captions. A limited number of copies of the retouched plates were printed in recto-verso and distributed without a title page, perhaps only after BONANNO's death. The most complete known copy of this issue, at the Botanical Institute of Palermo University, has 188 plates numbered 1-176, 185-192 and 195-198. Another copy, lacking the two sheets with plates 185-186 and 191-192, is at the Conservatoire Botanique de la Ville de Genève (Pierre Boillat, pers. comm.). The majority of the known copies of the "BONANNO edition" of CUPANI's work (e.g., those kept at the State Library in Berlin and by the Linnean Society of London) consist only of plates 1-168.

The botanical legacy of CUPANI is reported to have been stolen from the library of the Prince of Cattolica after his death in 1721. The valuable copper plates were presumably melted or re-used, as there is no reliable later mention of them. LANZA in 1927, in a paper partly reprinted here,

states that RAFINESQUE still had them, at least in part, in 1807 – but this is an obvious misunderstanding. In a prospectus distributed in 1807, RAFINESQUE announced that he proposed to re-engrave CUPANI's plates based on the original proofs, and publish them with a new text, and provided one sample plate. In 1810 he declared (in the preface to his *Caratteri*) that he had had to abandon his plan. Later still, in his autobiography of 1836, he stated that he had produced 120 such engravings, for which LANZA gives a publication date of 1812. The coppers are among those lost in RAFINESQUE's shipwreck in front of Long Island, in November 1815. According to Merrill (Index Rafinesquianus: 40-41. 1949), quoting TORNABENE, one full set of proofs of these engravings, lacking engraved captions, was in GUSSONE's possession in 1847, which may still exist in Naples, and a partial set of 63 was owned by TORNABENE himself. No details of either set are known.

The three volumes of the 1713 "edition" in the Central Library of the Region of Sicily form the basis of the present books. They are the best known copy, used by BIVONA, GUSSONE, and most other Sicilian botanists. The 615 plates of this set, omitting duplicate ones, are followed by 43 more that exist in the two other copies held at Palermo. The twin volume in Catania, which is the most complete, has also been collated, and equivalences between the figure numbering in all four copies are presented in a table. If this tabulation is exact and complete, then (contrary to what the introductory texts claim) the Catania copy must include 6 more plates not present in Palermo and not yet reproduced. Further unique plates may exist in the other copies and fragmentary sets mentioned in the literature.

In his foreword, Carlo PASTENA modestly refers to this triple volume as a "pre-print" and forerunner of future more complete editions. It is true that much remains to be done. First of all, one would wish an index to CUPANI's engraved polynomials. Next, equivalences with the plates in the BONANNO "edition", and in yet uncollated sets of the 1713 plates, would be desirable – and perhaps, at least tentatively, with the phrase names in CUPANI's *Hortus catholicus* and its *Supplementum*. Finally, a complete list of identifications of the illustrated plants (and animals) with presently accepted taxa might be envisaged. In spite of such wishes for the future, it is but fair to acknowledge that this "reprint" is a landmark for Mediterranean botanical science. CUPANI's unpublished figures have served as the basis for new species of UCRIA, BIVONA, PRESL, TINEO, GUSSONE, and LOJACONO. They are original material, often the very types for many names. Now at long last we can look at them! W.G.

94. Karel Boriwog PRESL – Flora sicula, exhibens plantas vasculosas in Sicilia aut sponte crescentes aut frequentissime cultas, secundum systema naturale digestas. Tomus primus [unicus]. – [Facsimile reprint: Italigraph, sine loco, 2003]. Borrosch, Praha, 1826. XLVI + [1] + 216 pages; paper.

Karel PRESL visited Sicily in 1817, the same year in which, near Palermo, the Boccadifalco Garden was founded under the supervision of Giovanni GUSSONE. PRESL made extensive collections on which he planned to build a complete new Flora of the island. This plan, unfortunately, never matured beyond the first volume, published in Prague in 1826 and now reprinted.

This volume covers about one fifth of the total vascular flora, viz., the dialypetalous families from *Ranunculaceae* to *Rutaceae*, delimited and arranged following the precepts of JUSSIEU and CANDOLLE. The Flora treatment proper is preceded by an introductory part with a concise description of the vegetation in 7 altitudinal zones, ranging from sea level to the top of Mt Aetna, plus an enumeration of the whole vascular flora, with validation of many new names by footnote diagnoses.

The whole book is a plain facsimile reprint, on paper patterned with mock mould staining in a shade of sepia. The sheet of *Corrigenda*, which is normally bound in at the end of the volume, follows after the Roman-paged *Enumeratio*. The reprint has no new introductory matter nor a title page of its own. A discreet imprint at the end mentions the printer ("Italigraph graphic service provider", which I found to be an offset printing shop in Milano) and the printing date, but nothing more, not even a source from where the reprint can be obtained. Nice to have it, then! W.G.

95. Francesco MINÀ-PALUMBO – Studj agrarj sulla campagna settentrionale delle Madonie. Proverbj agrarj. [*Annali di Agricoltura Siciliana,* ser. 2, **1.**] – [Introductory matter + facsimile reprint]: Grifo, Palermo, 1999. XVI

+ 298 + [3] pages; laminated cover. Price: 28,000 Lit.

The original book, here reprinted, was itself a consolidated reprint, having first been published as a series of instalments, between 1853 and 1855, in the Annali di Agricoltura Siciliana. The reprint commemorates the one-hundredth anniversary of MINÁ-PALUMBO's death. It is headed by a preface and commentaries written by Pietro MAZZOLA, Franco LO PIPARO, and Giovanni RUFFINO.

The author has collected 391 proverbs and maxims among the peasants of his home country, the villages situated on the northern slopes of the Madonie Mountains in Sicily. His declared intent was to put on record what one might call a code of sound agricultural practice, comprised in the popular lore of that rural area. He therefore not only translated the dialectal sentences into proper Italian (most fortunate that he did, because otherwise even being fluent in Italian you would hardly understand a word), he also gave elaborate explanations of the meaning and background of each.

Nowadays, agronomists will hardly care for such wisdom, and the book's significance lies elsewhere. To the elder among local people it may recall the tradition in which they grew up, and may help the younger not to forget it altogether; it may serve for comparisons between the rural traditions of Sicily and other regions, and help the linguists in their studies of local idioms; but to the outsider, it will chiefly convey the beauty and poetry of concise, elliptic paradigms created by simple folks to enshrine and transmit their own and their ancestor's wisdom. W.G.

96. Jean Henri FABRE – Il cielo. La terra. La pianta. – [Introduction + facsimile reprints]: Università degli Studi di Palermo, Seminario di Storia della Scienza, Palermo, 2002. [Original publications: Il cielo, letture e lezioni per tutti, ed. 5; La terra, letture e lezioni per tutti sulla fisica del globo, ed. 2; La pianta, lezioni sulla botanica. Sonzogno, Milano, 1928, 1927, [1924]. [8] + 287 + 259 + 310 pages, 74 + 26 + 188 text figures, 16 + 16 + 16 extra plates; 1 pamphlet + 3 vols., paper in cardboard box.

Jean-Henri FABRE is a fascinating personality, one of the last universal geniuses to live. This is no place for even a timid attempt at doing him justice. In a life span of 92 years (1823-1915), all spent in modest conditions when not poverty, he started from humble conditions to become a school teacher at the age of 19; stayed in Corsica 1849-1853, where he met his botanical mentor Esprit REQUIEN; taught at the lyceum in Avignon 1853-1870; obtained his DSc in Paris in 1855, having presented one thesis in botany on *Himantoglossum hircinum* and another in zoology on myriapods; was director of the Musée Requien in Avignon 1867-1873; by which time he had started a new career as writer of school textbooks, about 90 different ones in total, in fields as diverse as chemistry, physics, maths, cosmology, geography, geology, zoology, botany, general natural history, technology, literature, health care and housekeeping. His major fame he derived from his observations of the insect world, performed in retirement on an old farm in the Provence of southern France and published in ten series of *Souvenirs entomologiques* (1879-1907) that were translated into English under the title "Social life in the insect world". At one time he was even proposed for the Nobel Prize.

Whether this is sufficient reason for reprinting three of FABRE's popular textbooks in posthumous Italian translations I shall leave the reader to judge. You can take it for a fact that the texts are lovingly written in an admirably lively style, well in advance didactically on their time of origin. The first French edition of *La terre* was published in 1865, that of *Le ciel* in 1867; *La plante*, when it first appeared in 1876, bore the very personal subtitle *Leçons à mon fils sur la botanique* (his son Jules-André-Henri, the sixth of his 10 children, was then 15 years old; he was to die in 1877). The fact that many decades later, in the 1920s, these books were still popular in Italian class-rooms speaks for itself.

The corollary pamphlet explains the background of this unusual editorial venture, cosponsored by the Fondazione *Pro Herbario Mediterraneo* and thus closely linked with OPTIMA. The Science Faculty of the University of Palermo had set up a new Masters curriculum in Environmental Sciences. THis, following a suggestion from the Faculty of Architecture, gave birth to the idea of this reprint, which, thanks to the School for History of Sciences, materialised as a contribution to the history of didactics. An interdisciplinary approach if there ever was one – well worthy, I think, of FABRE's genius. W.G.

Symposium Proceedings

97. Francesco Maria RAIMONDO (ed.) – Proceedings of the X OPTIMA Meeting, Palermo, 13-19 September 2001. [*Bocconea* (ISSN 1120-4060), **16(1-2)**.] – Herbarium Mediterraneum Panormitanum, Palermo, 2003[-2004]. 1176 pages, tables, illustrations, 1 colour plate, 1 folded insert (table); 2 paper bound volumes. Price: 156 SFr.

The tenth Meeting of our Organisation was a memorable event in many ways, not only because of the fact that a tenth recurrence is a major jubilee. Remember: when the Meeting was declared open, on September 13, the world was still under the shock of Al Quaida's attack on the Twin Towers of the World Trade Center in New York. Air traffic was heavily impaired, and many of those who had registered were delayed or could not make it a t all. Francis Dov POR's inaugural lecture was delivered by Daniel ZOHARY, who managed to give it in free speech and in his own words, based on the absent author's manuscript text received the night before by e-mail. The very first item in the present, twin symposium volume is POR's original text.

Warm thanks are due to Franco RAIMONDO who, having acted as the main organiser of the Meeting, also accepted the heavy burden of editing its proceedings. They form two parts: the first, devoted to the lectures, was published in July 2003, the second, featuring the poster presentations, in January 2004 (never trust a stated date of publication if it falls on the last day of a year). Taken together, these two volumes far exceed the threshold of 1000 printed pages that no prior OPTIMA Proceedings had yet attained (the Patras Proceedings of 1991, with 987 pages, had skirted it).

In total, 118 papers are included, corresponding to the two general lectures, 38 of the 60 scheduled symposium lectures, and 78 of the 132 posters presented. The lecture papers reflect the wide range of subjects of the Meeting's symposia: Italian flora, urban botany, bryophytes, population dynamics, marine and freshwater algae, herbaria, "agro-biodiversity", global change and aridity, and conservation biology (except the one on plant differentiation, for which none of the lecture texts was submitted). W.G.

98. Anonymous – XIX Jornadas de Fitosociología. Congreso de la Federación Internacional del Fitosociología "Biodiversidad y Gestión del Territorio". Libro de Resúmenes. – Universidad de La Laguna, La Laguna, 2003. 166 pages; laminated cover.

The present booklet includes the scientific programme and abstracts of an important phytosociologial Congress that took place recently on the Canary Islands. (Item No. 45, above, concerns the excursion guide book for that same Congress.) The total number of abstracts is 111, corresponding to 6 lectures and 105 posters, presented in 4 sessions. Apart from two lectures dealing, one with Germany the other with Japan, and 4 posters with a general methodological thrust, all contributions concern the botany, vegetation or flora of Romance language countries: Peninsular Spain (58), Macaronesia (33), Latin America (9), and Italy (5). Also, all abstracts, apart from 11 in English and 3 with an English translation, are written in either Portuguese (9) or Spanish. W.G.

99. Anonymous – ICSEB VI. Sixth International Congress of Systematic and Evolutionary Biology. Biodiversity in the information age. September 9-16, Patras, Greece. Abstracts. – International Organization for Systematic and Evolutionary Biology, Patras, 2002. 345 pages; paper.

The world congress of students of systematics and evolution takes place every six years, taking turns with the International Botanical Congresses. ICSEB VI, organised in the Greek city of Patras on rather short notice, benefited of the congenial organisation of the biological teams of Patras University and of the country's traditional hospitality. It was a small meeting in terms of attendance, but great if scientific quality is taken as the measure.

The present book includes 257 abstracts of lectures and posters from all fields of biological systematics in the wide sense. Of the 29 symposia and single workshop, five were decidedly zoological and one (on Arctic and Alpine plant evolution; sponsored by the IAPT) botanical, but the vast majority were interdisciplinary, on topics ranging from nomenclature to phylogenetics, from biogeography to theoretical biology and

mathematical modelling. International cooperative research projects and networks such as ENBI (the European Network for Biodiversity Information), GBIF (the Global Biodiversity Information Facility), the All-Species Initiative, and ATOL (Assembling the Tree of Life) were prominently represented.

For practical purposes, the book would be hard to use but for a loosely inserted, folded sheet with a table of contents and numerical poster index.

It was never the intention to have the full proceedings of the Congress published as a coherent unit, but individual symposia were encouraged to envisage separate publication. This has been done, in particular, for the IAPT Symposium (see Taxon 52: 415-510. 2003). W.G.

100. Geôrgia KAMARÊ, Geôrgios PSARAS & Theofanês KÔNSTANTINIDÊS (ed.). – Ellênikê Botanikê Etaireia. 8° Epistêmoniko Sunedrio. 5-8 Oktôbriou 2000, Patra. Praktika. [Hellenic Botanical Society. 8th Scientific Congress. 5-8 October 2000, Patras, Greece. Proceedings.] – Ellênikê Botanikê Etaireia, Patra, [2001]. 479 pages, black-and-white illustrations, tables; paper.

101. Geôrgia KAMARÊ, Geôrgios PSARAS, Arês KUPARISSÊS & Theofanês KÔNSTANTINIDÊS (ed.). – Ellênikê Botanikê Etaireia. 9° Panellênio Epistêmoniko Sunedrio. 9-12 Maiou 2002, Argostoli-Kefalonia. Praktika. [Hellenic Botanical Society. 9th Scientific Congress. 9-12 May 2002, Argostoli-Kefalonia, Greece. Proceedings.] – Ellênikê Botanikê Etaireia, Patra, 2002 (ISBN 960-530-060-5). 366 pages, black-and-white illustrations, tables; paper.

Every two years the Greek Botanical Society meets for a Panhellenic Assembly. The 7th of the series had been held in 1998 in Alexandroupolis (see OPTIMA Newslett. 35: (35). 2000). This time we present the proceedings of the 8th and 9th, which took place in 2000 in the city of Patras and in 2002 on the Island of Cephalonia, respectively.

Most papers are in Greek with an English summary, only exceptionally does the reverse situation obtain. The subjects treated are from the whole domain of botanical sciences, with a fair representation of taxonomy, floristics and vegetation studies. As, regrettably, neither volume has a table of contents, and as arrangement of the papers is alphabetical by first author, regardless of subject, it is difficult to find one's way through either book. Therefore I will, for once, refrain from attempting an overview. W.G.

102. Anonymous – VIth Plant Life of Southwest Asia Symposium, 10-14 June 2002, Yüzüncü Yıl University, Van / Turkey. Program & Abstract. – Yıl University, Van, 2002. [2] + 151 pages; laminated cover.

103. Adil GÜNER, Shahina A. GHAZANFAR, Mehmet KOYUNCU & Nezahet ADIGÜZEL (ed.) –Plant Life of South-West Asia. Proceedings of the VIth Symposium. Van, Turkey, 10th-14th June 2002 [Turkish Journal of Botany. Türk Botanik Dergisi (ISSN 1300-008X), **28**(1-2) (special volume).] – Tübitak, Ankara, 2004. IV + 272 pages, figures, maps, graphs and photographs (some in colour); laminated cover.

Among the guests of honour of this memorable sixth PLOSWA Symposium, in which I was privileged to take part, were Ian HEDGE, co-editor of the proceedings of the first symposium of the series, which had taken place 32 years previously in Edinburgh; as well as Wilhelmina RECHINGER, still busy editing the last volumes of here late husband Karl Heinz's monumental *Flora iranica*.

Gathering at the far eastern end of Turkey on the very shore of Lake Van, in June 2002, were more than 160 botanists from 20 countries. The abstract book is remarkably complete, with 21 out of 22 lectures represented, plus 102 texts for posters of which only 89 were actually displayed. The symposium thus offered a varied, colourful selection of recent work on the plants and plant cover of Southwest Asia, with a strong emphasis on Anatolia.

The proceedings volume, skilfully edited and nicely printed, includes only those papers that survived a severe reviewing process: 16 that correspond to lectures and only 12 for the poster presentations; plus HEDGE's short, well worded introductory retrospect and outlook. W.G.

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OPTIMA Newsletter 37/2 / Informateur OPTIMA 37/2

Contents / Sommaire